Oral Presentation

The Feasibility of Endoscopic Assisted Y to U Pyloroplasty in Dogs

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Objective- Conducting the treatment during the endoscopy in patients with hypertrophic pyloric is conscious. The objective of the study was to evaluate the feasibility and safety of the endoscopic assisted Y to U pyloroplasty in dogs.
Design- Experimental prospective study
Animals- 3 healthy and adult dogs from mixed breed were selected for the surgery.
Procedure- Under general anesthesia, aseptic preparation of the right lateral abdomen was performed. After 12 hours of food restriction, gastric endoscopy was done in right lateral recumbency. The stomach was brought proximally by placing a cushion under the left lateral abdomen. The endoscope entered the pyloric antrum and the pyloric antrum and pylorus were located. Then a percutaneous stay suture placed to grasp the gastric wall at the right craniodorsal abdominal wall using 10 cm curved needle immediately after the last rib. The gastric wall was visualized through the video. Through a right paracostal minilaparotomy, the pylorus was located and the stay suture removed. Then a Y-U pyloroplasty was performed.
Results- Contrast radiography at 10 days after the surgery revealed the increase in pyloric diameter and the normal gastric emptying time was reported. No complication was reported in 2 months followed the surgery.
Conclusion and Clinical Relevance- The endoscopic assisted Y-U pyloroplasty is feasible and safe and also concurrent treatment and diagnosing pyloric obstruction endoscopy would be valuable and time-saving.
Key Words- Pyloric hypertrophy, Y to U pyloroplasty, Dog

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Oral Presentation

Evaluation of Procollagen Type I N-terminal Propeptid (PINP) and Collagen Type I C-telopeptid (CTX) in Serum and Synovial Fluid in Osteoarthritis

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Objective- This study was carried out to evaluate the serum and synovial fluid levels of procollagen type I N-terminal propeptid (PINP) and collagen type I C-telopeptid X (CTX) in early phases of osteoarthritis. PINP and CTX are two enzymes involved in osteogenesis and osteolysis.
Design- Experimental prospective study
Animals- Four, female, mixed breed, adult (20±3 mounths) dogs, weighing15±2 kg, were used for this study.
Procedures- In the present study serum and synovial fluid level of CTX and serum PINP were measured in four dogs before and 2, 4, 12, 24 weeks following experimental cranial cruciate ligament transection. Radiographs were taken simoultaneously.
Results- Statistical analysis showed significant differences in serum CTX (between 2weeks and 24 weeks post surgery) and PINP (between 24 weeks post surgery ad all the previous sampling). However there was no significant difference in measured synovial markers.
Conclusion and Clinical Relevance- Measurement of PINP and CTX in synovial fluid can not reflex the osteoarthritis condition in joint. However, other co-existing diseases involving bones should be excluded in order to use serum PINP and CTX as osteoarthritic diagnostic markers.
Key Words- PINP, CTX, Osteoarthritis

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Oral Presentation

Intrathecal Injection of Lidocaine in Dog as a New Method for Euthanasia with Animal Rights Consideration

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Objective- We know pet owners are concern over the issue of euthanasia and how to do it. Therefore to make decision which technique is more appropriate for euthanasia of pets is a highly stressful situation for veterinarians and may be source of some dilemmas; also, there are some matters i.e. financial drawbacks, when common methods of euthanasia such as overdose injection of anesthetic agents are used[1], so, in this paper a new humane method for euthanasia was described by intrathecal injection of Lidocaine in dog.
Design- Pilot clinical trial
Animals- Seven dogs which they suffered were nominated for euthanasia.
Procedures- After induction of anesthesia by combination of xylazine-acepromazine and ketamine[2], according to Modified Glasgow Coma Scoring System, unconsciousness of all animals was established. Then, 2-8 mL lidocaine was injected intrathecally, and quality of death, vital signs and electrical activity of heart were assessed subsequently.
Results- The results suggest that direct application of lidocaine on medullary region of CNS after induction anesthesia may causes loss of consciousness, respiratory arrest, bradycardia, atrioventricular block and finally cardiac arrest.
Conclusion and Clinical Relevance- Results showed that this method can be considered as a humane, affordable, rapid and irreversible way to end the dog's life where the death is inevitable and there is no kind of facilities for putting to sleep an animal[3].
Key Words- Euthanasia, Dog, Lidocaine, Intrathecal injection

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Oral Presentation

Evaluation of Gingival Lifting Technique with and without Sub Epidermal Graft

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Objective- Gingival lifting in 4th stage of periodontitis have some complication such as fine gingiva makes Alveolar bone formation lose and in human therapy lose af papilla that very important aesthetic dentistry . Thickness of gingiva is important factor and it may increase by sub epidermal autogeraft.
Design- Case series study
Animals- 16 mixed terrier dogs with mean age 6±0.5 year divided to 2 groups.
Procedures- Gingival flap was made and periodontal region was debrided ,autogenic bone use as bone graft, in first group flap extended bucal mucosal area and sutured with 0.5 vicryl and in second one after flap reflected sub epidermal graft from skin trimed and placed above the bone graft and flap closed. After 1 month pocket dept and thickness of gingival were measured and radiograph was taken to check the Alveolar bone.
Results- Gingival thickness in sup epidermal graft group are significantly difference than normal flap (p-value less or equal to 0.05 and main dept in second group is 3.5±0.2 mm).
Conclusion & Clinical Relevance- This technique has advantages because it provides tick gingival and it is very important for bone formation and other surgical treatment such as bone augmentation or implant.
Key Words- Aesthetic dentistry, Periodontal disease, Bone augmentation, Gingiva

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Oral Presentation

Evaluation of Effects of Patterns of Trocars and the Incision Size on Skin in Long Lasting Laparoscopic Procedures

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Objective- Minimally invasive surgery is gaining tremendous popularity in veterinary medicine. Patients undergoing MIS experience less pain, smaller scar and a faster recovery. Due to the use of different kind of ports the question remains that which type of port is associated with a better healing at the insertion site? And does the size of incision in the port site have an effect on the healing process or not?
Design- Animal experimental study
Animals- Five mixed breed female dogs were used in this study.
Procedures- 6 trocars (4 threaded dran and 2 smooth dran) were inserted in each dog. The incision was 10 mm in 4 trocar sites (2 threaded dran and 2 smooth dran) and 7 mm in the 2 other trocar sites (threaded dran). Thus the following factors were compared:
1. Trocars with a threaded dran and a 7 mm incision length (Group A) against trocars with a threaded dran and a 10 mm incision (Group B)
2. Group B against trocars with a smooth dran and a 10 mm incision (Group C)
Histopathologic evaluations were performed 2 days after the operations.
Results- Macroscopic comparison of group A and group B showed that the extent of skin damage was higher in group A.
Histopathology comparison between group A and group B revealed that the extent and severity of degenerative changes and necrosis in the dermal layer of the skin in group A was significantly higher than group B. Furthermore degenerative changes in the muscle in group A was higher than group B.
The loss of the peritoneal lining was higher in group A than group B.
Histopathologic comparison showed higher hemorrhage in the dermal and hypodermal layer of the skin in group B than group C. Acute inflammatory reaction was only significantly higher in group B than group C.
Conclusions and Clinical Relevance- This study showed that a smaller incision than the trocar's external diameter has damaging effects on the tissues. Moreover, though using a trocar with a threaded dran has some advantages, it can have harmful effects on the surrounding tissues and it is considered more destructive than a smooth dran trocars.
Key Words- Laparoscopy, Trocar, Dog

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Oral Presentation

Hydronephrosis due to Ureteral Ligation in Flank Ovariectomy in a Cat

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Case Description- A two-year-old Short Hair Domestic (DHS) cat was referred to Veterinary Teaching Hospital for elective ovariectomy (OE).
Clinical Findings- A two cm flank approach was used for surgery in the left flank. Surgical removal of both ovaries performed under general anesthesia.
Treatment and Outcome- The animal was recovered uneventfully and followed for two weeks. The cat was lethargic and anorexic. Upon ultrasonography, hydronephrosis of left kidney was diagnosed and

unilateral nephrectomy was performed. A week after surgery the animal was fine and had acceptable appetite.
Clinical Relevance- Hydronephrosis was due to ureter ligation which was advertently occurred during flank ovariectomy. Although there were few published reports about this complication, we suggest that surgeons meticulously ligate the ovarian pedicles when performing flank ovariohysterectomy or OE.
Key words- Flank ovariectomy, Ureter ligation, cat

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Oral Presentation

Reconstruction of Long Digital Extensor Tendon by Allogeneic Fascial Graft in a Dog; A Case Report

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Case Description- A two years old male mix dog, was presented with a non-weight bearing lameness of the right hind limband a deep rupture of lateral side of right tarsus. History taking revealed that this rupture appeared with unknown reason, 3 days before, when walking around the farm.
Clinical Findings- Radiography was done and fortunately, no fracture was seen. Over extension of right tarsal joint compared with left one, were observed.
Treatment and Outcome- Anesthesia were induced using Diazepam and Ketamine through an IV line. After dissections of the ruptured area, complete rupture of Long Digital Extensor tendon (LDE) was revealed. Then, attempt to head off the edge of the tendon, but the tendon length was shortened approximately 1 cm.So, a strip of 1 cm length from fascia of cranial tibial muscle were harvestedto fill the defect area.The graft were sutured to the two edges of tendon using locking loop pattern.Subcutaneous layersand the skin were sutured. Ehmer sling bandage were applied to prevent weight bearing on the surgical region.
Clinical Relevance- Phone contact with the owner 4 weeks and 4 months postoperatively revealed a poor lameness and excellent function of the dog.Tendon rupture in dogs is generally the result of a direct trauma. Avulsion of the LDE is a rare cause of hind limb lameness in dogs.This report suggested that the use of fascia of the adjacent muscles can be surveyed as an allograft for reconstruction of tendons.
Key Words- Long digital extensor tendon, Fascia, Graft, Dog

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Oral Presentation

Evaluation of a Constant Rate Infusion of Lidocaine on Oxidative Stress Parameters in Dogs Undergoing Ovariohysterectomy

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Objective- Lidocaine hydrochloride is an anti-inflammatory, analgesic and local anesthetic drug that today used broadly in balanced anesthesia. We decide to assess effect of this drug on oxidative stress parameters in dogs undergoing ovariohysterectomy.
Design- Randomized, Double blind, Experimental study
Animals- Ten female dogs were included. They were of mix breed, and the average of weight was 24.59 kilograms.
Procedures- Ten healthy mix breed of female dogs, randomly divided into treatment (Lidocaine CRI) and

control (Placebo) groups.Anesthesia was done using atropine (0.03 mg/kg SC), morphine hydrochloride(0.1 mg/kg IM), and acepromazine (0.05 mg/kg IM) as premedication, and followed by midazolam (0.2 mg/kg IV) and ketamine (5 mg/kg IV) as an induction. Isoflurane in 100% oxygen was used for maintenance of anesthesia. Treatment group received lidocaine loading dose (2mg/kg IV)immediately after induction, and followed within 5 min by a CRI (100µg/kg BW per minutes) using a syringe pump. Control group received an equivalent volume of saline instead of lidocaine as a placebo. Blood samples were collected before premedication, before linea Alba suturing, after extubation, and 24 hours after surgery. MDA, Thiol, and FRAP were measured as an oxidative stress parameters.
Results- For continuous quantitative variables repeated measure of ANOVA were used. There were no significant difference in Malondialdehyde (p=0.292), Thiol (p=0.217), and Frap (p=0.345)between treatment and control group; also no significant changes were seen in different times of sampling between each group (MDA; P=0.569, Thiol; P=0.834, Frap; P=0.134).
Conclusion and Clinical Relevance- In different studies lidocaine dispensed IV decreased Isoflurane end-tidal concentration in a dose dependent manner in dogs, and cat. The study of Smith and coworkers in 2004 resulted in reduction of post-operativeocular pain after the systemic administration of lidocaine. Surgical trauma cause oxidative stress in animals undergoing surgery, and due to lidocaine anti-inflammatory and analgesic effects we expected infusion of lidocaine intravenously may decrease oxidative stress parameters, however, our resultsunlikely have shown different findings.
Key Words- Constant Rate Infusion, Lidocaine, Ovariohysterectomy, Oxidative stress

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Oral Presentation

Evaluation of Efficacy and Feasibility of Laparoscopic Partial Nephrectomy in Dog

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Objective- Laparoscopic partial nephrectomy (LPN) has been proven to be a safe and effective technique in human. This study was conducted to elaborate this technique in dog which has no precedent in veterinary literature previously.
Design- Experimental study
Animals- Eight large mixed-breed female dogs, weighting 22±5 kg, 1-2 years age.
Procedures- All dogs were anesthetized and positioned on right lateral recumbency for surgery on left kidney. Laparoscopy was performed through five portals placed in left flank. After renal artery was recognized and clamped, the caudal pole of kidney was resected. Then the exposed renal parenchyma was sutured. Operative time, ischemia time, clinical findings, hematological parameters, blood urea nitrogen, serum creatinine and intra and post-operative complications were recorded.
Results- Clinical findings including heart rate, respiratory rate and body temperature, hematological and bloodchemistry parameters were within normal ranges. There was no significant post-operative complication except in one dog which showed infection in one port and was treated by antibiotic therapy.
Conclusion and Clinical Rrelevance- This experience demonstrated that LPN is a safe and feasible procedure in dogs.
Key Words- Dog, Partial nephrectomy, Laparoscopy

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Oral Presentation

Reverse Saphenous Conduit Flap: A Case Report in a Cat with Severe Large Metatarsophalangeal Degloving Injury

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Case Description- A four years old male cat was referred to the Veterinary Clinic of Urmia University with a history of non-weight bearing lameness of the right hindlimb due to dragging trauma of vehicle accident.
Clinical Findings- There was a large metatarsophalangeal degloving injury of dorsal right hindlimb along with the complete loss of digit II and III. Radiographs revealed the fracture of the lateral malleolus and tarsal join subluxation. No any other fracture, rupture or herniation was detected.
Treatment and Outcome- Initial debridement, lavage, and wound dressings was performed. Stabilization of medial malleolus fracture and luxation with internal fixators were also performed during the wound management. After two month a healthy pink granulation tissue was seen. Because of the large tissue and skin loss the reverse saphenous conduit flap was chosen for reconstruction. Before creating the flap, the length of skin needed is carefully measured. The proximal incision is made first, cranially to caudally and the saphenous artery and vein are ligated and divided. The cranial and caudal incisions are made to the level of the tibiotarsal joint. A bridging incision is made and the flap rotated into place. A drain was placed and the defects apposed. After five days the drain was removed. Two weeks later the graft completely healed and one month later hair grew.
Clinical Relevance- Treatment of large, distal extremity degloving injuries of dogs and cats is technically difficult. The desirable results achieved with the mentioned method, emphasize the use of this method for such cases.
Key Words- Axial pattern flaps, Reverse saphenous conduit flap, Abrasion, Degloving wound, Cat

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Oral Presentation

Root Canal Therapy and Full Metal Inlay for Treatment of Dental Fracture in Dog, A Case Report

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Case Description- A four years old male terrier referred for treatment of right upper jaw canine tooth old fracture and periapical lesion.
Clinical Findings- There was no sign of pain or inflammation on gingiva around the tooth .In first visit, the exposed dental palp had no reaction to mechanical manipulation, but radiological findings determined chronic infection of dental root.
Treatment and Outcome- After general anesthesia and intubation, semi dorsal open mouth positioning provided to better exposure and visualization .Fractured dental crown exfoliated by angled micromotor turbine to erase necrotic enamel and remove dirty deposits from dental pulp. Working length determined by periapical radiography and digital electronic apex finder set. Then canal washing and extraction of infected dental root accomplished by Hedstorm endodontic files. After pulp chamber and root canal flushed by sodium hypochlorite and radiographic confirmation of complete obturation, filling accomplished using Gutta Percha points. After casting and temporary superficial filling therapeutic procedure postponed 72 later to making prosthesis, then under second general anesthesia a full metal inlay applied to coverage fracture and reconstruct the tooth. 3 months follow up did not show any complication.
Clinical Relevance- Root canal therapy and metal inlay seems to a reliable method for canine toot fracture as reconstructive criteria in small animals and is advisable.
Key Words- Root canal therapy, Metal inlay, Crown therapy, Dog

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Poster Presentation

Evaluation of Breed, Age and Sex Effects on Lumbosacral injuries in Referred Cats to Shahid Chamran University of Ahvaz

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Case Description- Spinal injuries and associated neurologic dysfunction are encountered frequently in small animal practice especially in cats. Such injuries are most often the result of automobile trauma, or less commonly gunshot injuries, falls from heights, or animal abuse. The vertebral column has two distinct functions that become compromised in the injured animal and that must be considered in the diagnosis and management of each case. The first function is to house and protect the spinal cord itself. We examined different involved factors on 40 referred cats to Shahid Chamran University of Ahvaz during 1391 to1393 such as: age, breed and sex.
Clinical Findings- Among 40 referred cats to Shahid Chamran University of Ahvaz during 1391 to 1393 we saw that most of them had lumbosacral fracture problem so we attracted to examine this disease from different aspects such as: age, sex and breeds .we found that there is a significant relation between these factors with this defect in above mentioned understudied cats ($P<0.05$). The rate of lumbosacral fracture was equal50 percent in both native Iranian cats and DSH (Domestic Short Hair) cats so we resulted that breed has important role on this problem. It seems that age is involved in this problem for example we saw this problem more in younger cats between 1.5 months to 8months than others because sixty percent of these catshad 1.5 months to 8months and thirty percent were 8months to 1 years old and residue ten percent were 2.5 years old and up. The significant difference didn't show between females and males ($P> 0.05$) so it seems that sex has not important role on this disorder.
Treatment and Outcome-After taking radiograph from this section and diagnosis, the veterinary surgeon, in order to make a rational selection of internal fixation method, must understand the extent of mechanical deficits and have knowledge of the stability and strength provided by the fixation method relative to the specific injury being treated. Unfortunately, such information is not readily available. In result best available way to treatment is surgery and fixation, now. The prognosis and treatment of spinal fractures and luxations are strongly dependent upon the degree of neurologic injury and thus its accurate assessment.
Clinical Relevance- In the future, more studies are necessary to determine if age, breed and sex has direct effect on this disorder.
Key Words- Lumbosacral vertebra, Fracture, Cat, Radiography

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Poster Presentation

Undiagnosed Diaphragmatic Hernia in a Traumatized Cat

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Case Description- An adult male stray cat was referred to Urmia University's Veterinary Teaching Hospital for malconformation and lameness of the hind limbs with an unknown history. In physical examination, no wound or swelling was noted. Palpation of the limbs did not elicit any pain or tenderness.
Clinical Findings- X-ray revealed malunioned tibial midshaft fractures on both hind limbs and the cat was scheduled for reconstructive orthopedic surgery. The following day, the cat was presented for vomiting, dyspnea and mild cyanosis. On auscultation, muffled heart and lung sounds and thoracic borborygmi were noted. Chest radiographs showed interruption of diaphragmatic outline, increased radiopacity and gas filled intestinal loops in thorax.
Treatment and Outcome- The patient was pre-oxygenated and received judicious fluid therapy. Under inhalation anesthesia, assisted with manual ventilation, the ventro-lateral tear on the left side of diaphragm was exposed through a ventral midline incision, and protruded organs, including liver, jejunum, spleen and descending colon, were returned back to abdominal cavity. The tear was sutured with double layer simple continuous using catgut and dexon, respectively. Negative pressure was

applied with a 60-mL syringe connected to a chest tube placed in the left hemithorax. No recurrence or complication was noted in post-operative follow ups.
Clinical Relevance- Diaphragmatic hernias may occur after blunt or penetrating trauma. Due to coexisting injuries (e.g., bleeding wounds and fractures) and also the silent nature of the condition, diagnosis can sometimes be missed. A thorough physical examination and diagnostic procedures are strongly recommended, and diagnosis of diaphragmatic hernia should be kept in mind in the traumatized patients.
Key Words- Diagnosis, Hernia, Trauma

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Poster Presentation

Comparison of Minimally Invasive Endoscopically Assisted to Incisional and Belt Loop Prophylactic Gastropexy in Dogs

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Objective- The objective of this study was to compare the incisional and belt loop gastropexywith a minimally invasive endoscopically assisted gastropexy in dogs.
Design- Randomized trial
Animals- Twenty-one healthy and adult mixed-breed dogs weighting 14.3±2.6 kg
Procedures- The dogs randomly divided into three groups according to gastropexy techniques applied; incisional (group A), belt loop (group B), and endoscopically assisted gastropexy (group C). Surgical time, anesthetic time, length of surgical incision and score of pain at three hours after the surgery were recorded in all dogs. Two weeks after the surgery, positive-contrast gastrography was used to evaluate stomach position and the total gastric emptying time. Also, ultrasonography was used to evaluate the gastropexy in two months after the surgery.
Results- Adequate adhesion was confirmed two months after the surgery between the stomach wall at the pryloric antrum and right side of the body wall in all dogs using ultrasound. The mean surgical time, length of surgical incision and score of pain was significantly lower in group C compared to group A and B ($P<0.05$). No significant differences were found in total gastric emptying time and gastropexy thickness post operatively ($P>0.05$).
Conclusion and Clinical Relevance- Due to advantages observed in the current study, endoscopically assisted technique is a suitable alternative to the open incisional and belt loop gastropexies for performing prophylactic gastropexy, especially when applied by skilled surgeons.
Key Words- GDV, Prophylactic gastropexy, Dog

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Poster Presentation

Report of Persistent Hymen in Dog

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Case Description- In winter of 1392, a mixed breed dog, 2 years old, due to the heavy licking pubic area, and skin inflammation of vagina was referred to the clinic of veterinary university.The history obtained from the owner of animal.
Clinical Findings- We found the frequency and severity of urinary excretion, the perennial wet of bed, pain and restless and unwilling animal mating with regard to libido. In genital examination area swelling, smelly discharge vagina, vulva and skin inflammation was observed. At this stage the internal genital touching and

vaginoscopy, resistant hymen was observedin form ofrelativelythick septum from top to bottom vagina and completely canal stenosis. This septum inhibits to entrance the male dog penis and made pain during sexual intercourse due to the pressure.

Treatment and Outcome- For treatment, the blade was isolated from areas that are attached to the vaginal with surgical operation, and antibiotics were prescribed for the treatment of bladder and genitals infection.

Clinical Relevance- The hymenis is a thin membrane that located in the output of female reproductive system and cause the separate the vestibule area from the vagina. In a normal model the thin membranehas a fissure forsecretion removalofthe reproductive system, and usuallyafter the firstmatingistorn. However, in somedefects, the hymen observes as anon-porousandresistant membrane or in the form ofverticalbladewhichdivided vagina into two parts.

Key Words- Resistent hymen, Vagina, Dog

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Poster Presentation

Plasmocytoma, A Case Report

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Case Description- A 4 year old male Great Dane dog was referred with chief complaint of anorexia and weight loss since it was 2 months (about 30 kg).

Clinical Findings- A plain radiography revealed a soft tissue mass in cervical region in ventral aspect of vertebrae. Contrast esophagogram revealed that the mass is extra luminal and has pressure on esophagus. Moth eaten osteolytic lesions were also detectable in the cervical vertebrae.Ultrasonography revealed capsulated mass with heterogeneous (soft tissue and hyperechoic areas) with central and peripheral blood supply. Core biopsy was taken with the ultrasonographic guidance.

Treatment and Outcome- Histopathologic examinations showed that anisocytosis and anisokaryosis were predominant features. Individual cells with round nuclei and indistinct nucleoli, multi nucleated cell and also amorphous eosinophilic material were observed in pathology slides. Inflammatory cells and mitosis feature (mostly neutrophils) were present. The lesion was diagnosed as plasmocytoma. The patient had been authorized by the request of owner. Gross pathology revealed a raised red or ulcerated, quite well-defined mass.

Clinical Relevance- Investigation of canine dysphagia is performed by a combination of diagnostic imaging of upper gastrointestinal tract, and ancillary diagnostic testing to differentiate between structural and functional causes. Neoplasms of plasma cell origin should be included in the differential diagnosis of round cell tumors in the skin and mucous membranes of dogs. Thus plasmocytoma should be considered as differential diagnosis of extra luminal esophageal masses with heterogeneous ultrasonographic appearance.

Key Words- Plasmocytoma, Dog, Ultrasonography

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Poster Presentation

The Use of Tension Band Wire for Treatment of Dorsal Acetabulum Fracture in an Accidental Cat

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Case Description- A mature female domestic short hair cat referred with accident history and left carrying-leg lameness.

Clinical Findings- Clinical examination showed pain, crepitus and swelling in proximal part of femur and pelvic cavity. To detect, types and location of probably fracture, orthogonal views (lateral and ventrodorsal) were

took. Fracture of dorsal aspect of acetabulum without hip dislocationwas assessed by radigraphical assessment.
Treatment and Outcome- Open approach and internal fixation indicated for this instable fracture. Anesthesia inducedusing ketamine and diazepam and anesthesia maintenancewas achieved using ketamine.Cephazolin administrated 15 min preoperatively.Craniodorsal and caudodorsalaspects of the hip joint were exposed by Osteotomy of the greater trochanter and gemelli muscle tenotomyto access to caudal part of acetabulum.The dorsal side of acetabulum was used for tension band fixation. Two Kirschner wire crosses the fracture line to prevent shearing motion at the fracture surfaces and tension band was executed. Finally, Rear legs hobbled to restrict abduction until healing was progressed. Tramadol and Ketoprofen administrated for 3 days to relief pain.Radiographical and return to activity assessment 60 days after surgery showed perfect callus and maturation and appropriate quality of activity
Clinical Relevance- Fractures of pelvis are relatively common and in many veterinary practices they constitute 20% to 30% of all fractures. Pelvic fractures rarely are open or compound. Tension band wire fixation can be used only on interlocking, stable two-piece fractures. Simply compressing the fracture will not prevent this type of motion. This type of fixation is not as stable as a plate or lag screw and is best reserved for small breeds of dog and cats.
Key Words- Tension band wire, Acetabulum, Fracture, Cat

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Poster Presentation

A Case Report of Several Persistent Primary Teeth Associate with Enamel Hypoplasia in a Puppy

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Case Description- A 4 monthes female mix breed pekingese was examined for routine check up for vaccination.
Clinical Findings- In oral examination of puppy, two raws of teeth were seen in cranial margin of labial level of maxillary gum. There was a lack in enamel production in some teeth especially in upper canines and lower premolars.
Treatment and Outcome- In such cases therapy ranges from a gingival incision, which allows the tooth to erupt, to extraction or oral surgery. About enamel hypoplasia restorative therapy will protect the tooth while they develop. Regular brushing of these teeth is important to control plaque and tartar that easily accumulates on them.
Clinical Relevance- Retained deciduous teeth can also delay the eruption of the permanent teeth. Even if the permanent tooth is not delayed in eruption, it may be deflected by the deciduous tooth and can contribute to malocclusion. Sometimes the periodontal ligament space between the two teeth is compromised and periodontal disease will progress until laterEnamel hypoplasia is a developmental condition in pets. These pets' teeth are covered with abnormal or pitted enamel. This will appear as a rough and yellow stained surface of the affected tooth. Common causes are pyrexia, trauma, malnutrition, toxicosis (eg, fluorosis in cattle), and infections (eg, distemper virus in dogs).
Key Words- Persistent primary teeth, Enamel hypoplasia, Dog

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Poster Presentation

A Case Report of Secondary Ectopic Pregnancy in a Spitz Bitch

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Case Description- An eight years old Spitz bitch was presented to Urmia University's Veterinary Teaching Hospital for check up at the 60th day of her pregnancy. The bitch had no history of dystocia or cesarean section in her previous parturitions.

Clinical Findings- At admission, she was asymptomatic, and physical examination revealed no abdominal tenderness or rigidity and the vital signs were normal. Lateral abdominal x-ray revealed two developed fetuses. However, no fetal heart beat were detected by ultrasound. Based on fetal death and lack of signs of parturition, the dog was scheduled for cesarean section.
Treatment and Outcome- Under inhalation anesthesia, through the ventral midline approach, attempts were made to exteriorize the gravid uterus, however, extensive adhesions were noted. Further explorations revealed multiple uterine perforations and intra-abdominal fetal Implantations. The fetuses were implanted on spleen, descending duodenum, stomach, greater omentum, and right abdominal wall. Placental attachments were dissected free and ligature was placed as needed. An ovariohysterectomy was performed due to severe devitalization of uterus.The bitch made a complete recovery and no postoperative complications were observed.
Clinical Relevance-Secondary ectopic pregnancy occurs as a result of a flaw in uterine wall mostly due to trauma that allows the conceptus to implant and mature outside the endometrial cavity, which ultimately ends in the death of the fetus. Without timely diagnosis and treatment, ectopic pregnancy can become a life-threatening situation. The only treatment recorded in the bibliography for ectopic pregnancies in animals is surgical removal, either with or without ovariohysterectomy.
Key Words- Dog, Ectopic pregnancy, Ovariohysterectomy

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Poster Presentation

Surgical Treatment of Congenital Phimosis in Two German Shepherd Mix Puppies; A Case Report

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Case Description- Two2-week old male twins mix breed puppies were presented because of inability to urinate.
Clinical Findings- The puppies were born 2 week before.Their parent were sibling. They were not able to urinate normally. The area was irritated due to accumulation of urine under the skin. They had a too small preputial opening.
Treatment and Outcome- Anesthesia were induced using diazepam and ketamine through an IV line. The puppies were positioned in dorsal recumbency. The tips of the preputial orifice were elevated and a full-thickness circular incision were applied around it. Then a circular flap of the skin was excised. Finally, the mucous of the prepuce were sutured to the skin in a circular manner using simple interrupted pattern with polyglyconate.
Clinical Relevance- Phimosis is rare. It is usually the result of a preputial opening that is too small or absent. The common presenting signs are abnormal urination, preputial swelling and inability to copulate in breeding animals. Abnormal urination can include a small stream or dribble due to urine accumulating in the preputial cavity. This collection of fluid can lead to secondary balanoposthitis.Congenital stenosis of the preputial orifice has been reported to be breed-related in German shepherds, golden retrievers, mix breeds and et al.In this case, it seems the genetic similarity of their parent was involved in the creation of this complication.After 10 days ofpostoperative follow-up, there was an excellent function of the puppies and ability to urinate in a normal manner.
Key Words- Phimosis, Preputial stenosis, Dog

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Poster Presentation

Surgical Correction of Cleft Palate Secondary to Trauma in a Cat

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Case Description- An eight-month-old intact male DSH cat was presented with a history of falling three flights of stairs the day before referral. The owner's chief complaint was lameness on the right forelimb**.**
Clinical Findings- Upon physical examination a rather long fissure was observed in the secondary palate which seemed to be due to the trauma caused by high-rise syndrome. The wound was clean-contaminated, the edges were sharp with little inflammation and it appeared to be within the golden period. No connection between oral and nasal cavity was observed and the palatine bone looked intact. Furthermore the fissure didn't extend to involve the soft palate.
Treatment and Outcome- Based on the wound properties the primary closure approach was applied. The patient underwent inhalation anesthesia and the fissure was closed with simple interrupted sutures utilizing nylon 4-0 suture material. The wound was examined on days 3 and 14 after the operation. The healing went smoothly and wound repair seemed uneventful. On day 14 the sutures were removed and the patient has been in good overall health ever since.
Clinical Relevance- Traumatic cleft palate occurs most frequently due to dental problems. To the author's knowledge this is a rare case of feline hard palate fissure without damaging the bones as a result of high-rise syndrome. Because the palatine bone was intact, the healing occurred promptly as expected and no complications arose afterwards.
Key Words- Cat, Hard palate, Cleft palate

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Poster Presentation

Total Splenectomy in a Dog Due to Internal Hemorrhage Caused by Trauma

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Case Description- A one-year-old intact female Pekingese dog was referred to Surgery Department with a history of falling four flights of stairs two hours earlier.
Clinical Findings- Upon physical examination tachycardia was prominent. The mucous membranes were pale and capillary refill time exceeded 3-4 seconds. The patient was entering the state of shock. Internal hemorrhage was suspected. Ultrasound examination revealed the presence of abundant amount of free fluid in the abdominal cavity as well as pulmonary hemorrhage. Under ultrasonic surveillance aspiration of the fluid was performed which resulted in a reddish blood-like fluid. The patient's overall status was rapidly deteriorating.
Treatment and Outcome- Firstly the patient received supportive fluid and Oxygen therapy. Due to lack of donor and the animal's emergency situation, it was immediately prepared for exploratory laparotomy to locate the source of bleeding and prevent it from further blood loss. When the celiotomy incision was done, significant amounts of bloody free fluid were apparent in the abdominal cavity as a result of spleen rupture. Total splenectomy was performed due to irreversible damage. The patient received blood transfusion 12hours later. It was observed on days 1 and 14 post operation and its overall health has been constantly satisfactory ever since.
Clinical Relevance- Injuries to spleen due to trauma are reported to be rare in companion animals. Severe trauma to the spleen that causes life-threatening hemorrhage which cannot be stopped is an indication for total splenectomy. Although it has been stated that most cases do not require surgical intervention to stop bleeding, the current patient responded splendidly to the surgery and post-operative care.
Key Words- Dog, Total splenectomy, Spleen rupture

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Poster Presentation

A Case Report of Apocrine Gland Adenocarcinoma of the Anal Sac Associate with Hypercalcemia Signs in a Neutered Male Great Dane

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Case Description- A seven years old male Great Dane was examined for tenesmus, but taking history showed dog is suffered from polydipsia, polyphagia, hind limb tremor and weakness.
Clinical Findings- In clinical examination, there was a firm mass around anus. Blood examination showed hypercalcemia (17mg/dl).Fine needle aspiration showed tumoral cells. Histopathologic examination confirmed an adenocarcinoma of the apocrine gland.
Treatment and Outcome- Dog was operated and all tumors were removed surgically. Treatment with antibiotic (cephalexin) performed for 10 days. Any relapse has not seen after 1.5 year.
Clinical Relevance- Anal sacs disease is the most common disease entity of the anal region in dogs. Apocrine gland adenocarcinomas of the anal sacs are typically seen in older female dogs. These dogs are presented for signs secondry to hypercalcemia, such as polyurea and polydipsia, or for problems related to the perineal mass. Hypercalcemia can be toxic to all body tissues, but major deleterious effects occur in the kidneys, nervous system, and cardiovascular system. Serum calcium concentration of ≤15mg/dL may not be associated with systemic signs, but serum concentration of >18 mg/dL are often associated with severe life-threatening signs. Humoral mechanisms are mostly responsible for the hypercalcemia as a PTH-like protein has been identified from tumor tissue in dogs.
Key Words- Apocrine gland adenocarcinoma, Anal sacs, Hypercalcemia

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Poster Presentation

Surgical Excision of Epulis in a Spitz Dog: A Case Report

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Case Description- A 7 years old female intact Spitz dog with the history of mammary gland tumor excision was presented with a mass in gingiva from 2 weeks before to the Small animal Hospital of University of Tehran.
Clinical Findings- Clinical examinations revealed firm, smooth, pink multiple masses in rostral region of maxilla. In radiographic examinations permeative lysis between canine and 3rd incisor of right maxilla in association with soft tissue swelling was detected. No typical sign of metastasis was detected in 3 view thoracic radiographies.
Treatment and Outcome- The patient underwent surgical treatment and the gingival mass excised from the right maxilla by electrosurgical unit. Histopathological evaluations confirmed fibromatous epulis which had small amount of osteoid formation.
Clinical Relevance- Oral tumors are those neoplasms that arise from the gingiva, buccal mucosa, labial mucosa, tongue, tonsils, or dental element. The epulides are the most common benign oral neoplasms, accounting for 30% of all canine oral neoplasms. There are three types of epulides: fibromatous, ossifying, and acanthomatous. Fibromatous epulides are noninvasive, firm, smooth, pink masses that originate at the gingival sulcus and may be single or multiple, and pedunculated or sessile. Epulides more occur in large breed dogs with mean age of 8.2 years.
Key Words- Epulis, Spitz, Oral tumor

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Poster Presentation

Surgical Removal of Perforating Metallic Foreign Body Ingested by a Dog

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Case Description- A one-year-old intact male mixed-breed dog was referred to Surgery Department with a history of intermittent vomiting and anorexia for several days.
Clinical Findings- Upon physical examination the patient appeared rather lethargic and displayed signs of tachypnea. According to the history (age, symptoms) and examination, gastrointestinal foreign body ingestion was suspected. Radiographic examination revealed a linear foreign body with metallic opacity in the right cranial region of abdomen, probably located in duodenum or proximal part of jejunum. On ultrasonographic examination, localized peritonitis was detected in the right abdominal region, as well as lack of peristalsis and potential intussusception in a part of small intestine near the right kidney.
Treatment and Outcome- Since perforation of gastrointestinal tract was highly suspected based on radiographic and ultrasonographic findings, exploratory laparotomy was inevitable. Upon celiotomy the wire-like foreign body was discovered on the external surface of greater curvature of stomach. The small intestines were thoroughly examined yet no abnormalities were encountered. The patient received post-operative care and was examined on days 3 and 14 after the operation when it had restored its appetite and appeared healthy. Tachypnea proved to be due to pneumonia according to further radiographic examinations.
Clinical Relevance- Ingesting foreign bodies is a common occurrence among dogs. Linear foreign bodies have been reported to be associated with significant increase in mortality. Perforation of foreign bodies can lead to peritonitis and potential damage to heart. In the current case, surgical approach to treatment of the perforating metallic foreign body along with post-operative medication resulted in a satisfactory state of healing in the patient and no complications arose afterwards.
Key Words- Foreign body, Linear foreign body, Metallic foreign body, Dog

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Poster Presentation

Comparison of the Usual Ways for Ventriculocordectomy in Dogs

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Objective- One of common problems of keeping a dog in houses and apartments is barking.
The aim of this study was reduction and correction the voiceof barking.
Design- Descriptive study
Animal- Mix breed dogs
Procedures- We did this procedure by using oral and laryngotomyapproaches. The first approach we did waslaryngotomy: at first shaving was done**.** Thenwe usedacepromazine (0.1 mg per kg) and ketamine (20 mg perkg) for anesthesia.Then anincisionwas done on the larynx. We inciseed the cricothyroid ligament. Vocal folds were excised entirely by the metzenbaumscissors. Thenmucous membrane and thyroid cartilage of larynx and subcutaneous and skin were stitched routinely oneby one. After healing the animal started to bark and the noise of barking was reduced so much. The second approach we used was oral approach that needed no incision. The anesthesia procedure was like the first approach. The tongue was stretched out by the sponge forceps then the accurate place ofvocal cords was identified by the laryngoscope. By the use of long-handled curvedmetzenbaum scissor the vocal folds were removed as possible. After this surgery the barking voice was reduced so much.
Results- The comparison of these two ways of operation has shown the advantage of oral approach instead of laryngotomy approach. This advantageswere faster healing, reduction time of operation and anesthesia so we suggest oral approach.
Conclusion and Clinical Relevance- This ways of ventriculocordectomycan be used to reduction and correction of barking in dogs
Key word- Ventriculocordectomy, Vocal fold, Barking

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Poster Presentation

The ESF-IM Pin Tie-in Fixation in Multiple Fracture of Humerus in an Eagle

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Case Description- A traumatic eagle referred to veterinary hospital of Shahid Chamran university with multiple open fracture in the right humerus.
Clinical Findings- Radiographic assessment confirmed clinical examination and showed multiple fracture in the diaphysis of humerus. Open, dirty wound, multiple and unstable segment fractures indicated external fixator.
Treatment and Outcome- The bird anesthetized by Ketamine-Diazepam (20mg/kg and 1 mg/kg respectively) via intraosseous administration.ESF-IM Pin tie-infixation executed in this traumatic fracture. First, IM pin inserted to medullary cavity through minor tubercle and fixed in the medial condyle to resist bending forces. Then six fixation pins crossed two cortexes in dorsal aspect of humerus. Ultimately, bottom of fixation pins bended andall of rods fixed in acrylic. The bird received lincospectin for 5 days.
Clinical Relevance- Long-bone fractures in avian species are managed with a variety of techniques, such as external coaptation; intramedullary (IM) pins; polypropylene rods; IM polymethylmethacrylate, with or without polymer rod reinforcement; bone plates; and external skeletal fixators (ESF). The ESF-IM pin tie-in configuration has severaladvantages for fracture repair in birds. Thecombination of an IM pin linked to an ESF createsan "I-beam" structure best able to resist all forcesacting on a fracture site. An IM pin used aloneis unable to resist the forces of shear, torsion, andcompression, all of which can be opposed by theESF; conversely, the limited ability of the ESF toresist bending is compensated for by the effectivenessof the IM pin in opposing this force in alldirections.In addition, the ESF-IM pin tie-inmethod prevents migration of the IM pin, thuslessening the risk of formation of proliferativefibrous tissue and scrum pockets that can commonlyoccur when an IM pin is cut short andcovered by skin.The tie-in method also simplifiesachieving proper bone alignment compared withusing an ESF alone.
Key Words- ESF-IM Pin Tie-in, Humerus, Fracture, Eagle.

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Poster Presentation

Unilateral Split-Forelimb Malformation in a Puppy: A Case Report

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Case Description- A two-month-old mix breed female puppy with a malformation in the left forelimb was admitted at Urmia University's Veterinary Teaching Hospital.
Clinical Findings- External features included two normal hind limbs, normal right forelimb and malformed left forelimb. In clinical examination a protruded bony structure on the left forelimb was noted. X-Ray revealed split forelimb in distal part of radius and ulna. Carpal bones except first and four digits were connected to ulnar bone, whereas first digit, metacarpal and carpal bone connected to radius. Soft tissue's split was extended to distal metaphysis of radius bone. The carpus was also deviated caudo-medially.Serum biochemical values were in normal range.
Treatment and Outcome- Although the animal had problems in weight bearing, because of dissatisfaction of the owner for surgery, no surgical treatment was applied.
Clinical Relevance- This kind of congenital anomalyis a rare condition which can result in lameness and difficulties in locomotion. This condition should be differentiated from polymelia, a congenital defect descriptive of extra leg. To our knowledge this malformation has not previously been reported in puppies.
Key Words- Unilateral, Forelimb, Malformation, Puppy.

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Poster Presentation

Syringomyelia in Mix Breed Dog: A Case Report

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Case Description- A 10 years old mix breed dog with the history of abnormal gait and abnormal weight bearing was presented to small animal hospital of University of Tehran.
Clinical Findings- Clinical examinations revealed abnormal weight bearing and lack of balance in gaits. The patient felt pain in cervical region, and sensitive to touch in neck and shoulder and sternum.
Treatment and Outcome- The patient referred to radiology section and radiographs and Magnetic Resonance Imaging (MRI) showed longitudinal cavity within the spinal cord which is known as syringomyelia.
Clinical Relevance- Syringohydromyelia is characterized by longitudinal cavity within the spinal cord that extends over several vertebral segments. Typically, the syrinx contains fluid that is highly similar in composition to the CSF extracellular fluid. Syringomyelia traditionally was classified into Communicating (disruption of CSF dynamics at the cranial cervical junction) and Non-communicating (a primary spinal cord condition). For canine patients, surgical management is indicated when analgesics do not control discomfort or when neurological deficits are present.
Key Words- Syringomyelia, Dog, Spine

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Poster Presentation

A Surgical Report of a Severe Necrotic Vaginal Prolapse in An Intact Bitch

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Case Description- A 14 month mixed breed bitch without a history of parturition with a large protruded mass from the vagina was referred to small animal clinic. The dog received PGF2 to bring on ovulation. Sugar and hypertonic dextrose was used for lavage and reduction of edema. The mass became severely edematous and necrotize after 2 days. The patient did not urinate during this period.
Clinical Findings- The dog received PGF2 to bring on ovulation. The mass became severely edematous and necrotize after 2 days. The patient did not urinate during this period. Vaginal prolapse is the protrusion of vaginal tissue through the vulva. It is seen mostly in young female dogs of the larger breeds that have not been spayed.It is seen mostly in young female dogs of the larger breeds that have not been spayed.
Treatment and Outcome- Sugar and hypertonic dextrose were used for lavage and reduction of edema. The surgical removal of a mass was decided. After aseptic preparation of abdomen and perinea the conventional midline ovariohysterectomy was performed. Then through episiotomy incision, the entire circumference of the vaginal wall to remove the necrotized mass was incised. Care was taken to save urethral orifice and external anal sphincter. The vagina was anastomosed with its proximal end and reduced. The episiotomy was sutured in two layers.
Clinical Relevance- Management of vaginal prolapse could be very difficult when tissue necrosis and urinary blockage occur. The recurrence rate is about 66-100% in the next estrus. Ovariohysterectomy prevents the condition and enhances the resolution of prolapse as well.
Key Words- Prolapse, Vaginal, Necrotic, Episiotomy

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Poster Presentation

Orthopedic Surgery and Post Operation Management of Radius and Femur Fracture in European Eagle Owl (Bubo bubo): Case Report

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Case Description- Mature European eagle owl (Bubo Bubo) with 2kg weight
Clinical Findings- Radiographs was shown that left femur had fractured in shaft and there was bolt on left elbow.
Treatment & Outcome- Surgical treatment was operated by inducting Anesthesia with 10mg/kg of Ketamine as HCl and Diazepam. 5mg/kg. Femur was surgically reduced and fixed by IM pin and stanless still wire bolt was removed and wing fix with figure eight bandage pattern.
Clinical Relevance- Most of wild birds are very porn to calcium deficiency and osteoporosis, they are often dehydrated due to these issues we must manage these things before and after operation.
Key Words- European Eagle Owl, Femur Fracture, Redius Fracture, Avian Anesthesia

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Poster Presentation

Partial Remove of the Soft Palate and Tonsillectomy in a Pregnant Bitch with Atrial Fibrillation

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Case Description- A two and half years old Pug with history of progressive symptoms of snoring, intolerance minimal physical activity, wake suddenly up from sleep, was referred to the Veterinary Clinic.
Clinical Findings- In General examination of the respiratory tract, tonsils and posterior of soft palate at pharynx was enlargment. Taken electrocardiogram was showed slight atrial fibrillation. Lateral recumbency radiographs approved three fetus in the uterus, normal condition in thorax and amount of soft tissue mass in pharynx.
Treatment and Outcome- Atropine shortly before surgery were used. In next step using a minimum dose of acepromazine and then propofol was induced surface anesthesia. One after another, Local injection of lidocaine with adrenaline in surgical site, tracheal intubation, throat and mouth washing with a solution of oxytetracycline was done. Tonsils and unneeded part of the soft palate were removed and ampicillin was injected in general.
Clinical Relevance- Anesthesia method was addition of local and surface general anesthesia for decrease amount of the drugs. Used drugs Side effects was planned to neutralized each other and minimum impact to patient and her fetuses homeostasis.
Key Words- Atrial Fibrillation, Tonsillectomy, Soft Palate, Anesthesia in Pregnancy

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Poster Presentation

Removal of an Oral Osteoma without Mandibulectomy in a Cat

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Case Description- 11 year old intact female cat**,** with a2 cm mass at the caudal mandible that resulted in a malformation of the mandible was referred to the

clinic.The mass was non-painful and was noticed a week prior to presentation.
Clinical Findings- A non-painful mass was noted in the right mandible. No nasal or ocular discharge was observed. Also, there was no vomiting, diarrhea, coughing or sneezing reported by the owner. Radiography confirmed presence of a circular mass with a density similar to the bone; diagnosed most probably as an osteoma. No ostoeolysis or teeth loss was occurred. Also, no invasion to other oral structures was observed.
Treatment and Outcome- Radical excision of the tumor was performed without right caudal mandibulectomy because the tumor was non invasive to the adjacent structures.
Clinical Relevance- This study revealed that the best opportunity to cure or control ofbenign oral tumors is surgical resection. Since the osteoma tumors are usually non-invasive, radical resection of the tumor according to its location is recommended. The prognosis is usually good and no adjunact treatment is required.
Key Words- Cat, Osteoma, Mandibulectomy, Invasive

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Poster Presentation

Gastric Obstruction by Foreign Body in a Rabbit

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Case Description- A 2 years old female intact rabbit suffering from anorexia and lethargy presented to Shiraz Veterinary Teaching Hospital.
Clinical Findings- After examination abdominal mass was revealed.By X-ray imaging and ultrasonography gastric obstruction was suspected. Administering lubricants and pineapple juice was not helpful. The rabbit referred to surgery department.
Treatment and Outcome- An exploratory celiotomy was performed and some abnormalities with liver noted. After gastrotomy the foreign body responsible for gastic obstruction removed, which was a carpet fiber ball/hank. The rabbit was discharged after recovery. The owner has informed that the rabbit expired the day after surgery.
Clinical Relevance- Foreign bodies and trichobezoars are responsible for some death in rabbits especially free roaming ones in home. Surgicalremoval of the trichobezoar is a last resort. The association between trichobezoarsand fatty liver was noted in earlier reports
Key Words- Rabbit, Gastric obstruction, Trichobezoar

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Poster Presentation

Internal Fixation of a Proximal Physeal Fracture and Concurrent Tibial Tuberosity Avulsion in a Husky Dog

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Case Description- A six months old male husky dog was brought to the Small Animal Hospital of University of Tehran with fracture in the proximal part of left tibial bone confirmed by x ray evaluation performed in an imaging center outside the hospital.
Clinical Findings- On radiographic evaluations a saltter-haris fracture type II in proximal part of left tibia was reported. An avulsion fracture of tibial tuberosity, arthritis in left tarsal joint and presents of a chip fracture in the affected joint were other reported concurrent injuries.
Treatment and Outcome- Treatment was performed byopen reduction and internal fixation. The proximal part of tibial bone was fixed in its anatomical position using tow Steinmann pins (placed in crossed fashion) and the fractured tibial tuberosity was fixed by tension band wiring.
Clinical Relevance- Separation of the proximal tibial physis is an uncommon injury seen only in immature patients .they are usually Salter Harris type I or type II injuries. The entire epiphysis and tibial tuberosity are

usually involved, associated with caudal rotation of the tibial plateau and craniomedial displament of the proximal tibilal metaphysis. Such rotational deformity is severely disabling since the stifle cannot be fully extended. In most cases of type II physical fracture, an open approach is necessary for returning the epiphysis to its proper position.

Key Words- Tibia, Salter Harris Fracture, Tibia Tuberosity

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Poster Presentation

Surgical Treatment of a Paraprostatic Cyst in a German Shepherd Dog: Case Report

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Case Description- A 7 year old male intact German shepherd dog was admitted to the small animal Hospital of University of Tehran with the main complain of hematuria and bloody penile discharge.
Clinical Findings- On clinical exam no abnormality was observed and blood values were also within the normal limits. On x-ray evaluation, there were no signs of urolith, but ultrasonography evaluation confirmed the existence of a paraprostatic cyst in dorsocranial part of the prostate.
Treatment and Outcome- On surgical repair orchiectomy followed by drainage and omentalization of the existed cyst was performed.
Clinical Relevance- Conditions involving the canine prostate gland include benign hyperplasia, squamous metaplasia, prostatic and paraprostatic cysts, acute and chronic prostatitis, abscess, prostatic carcinoma.
The paraprostatic cyst is among the rarest of diseases. Krawiec and Heflin examined 177 patients with changes in the prostate gland, finding a cyst in only 2 of 177 cases.

Key Words- Paraprostatic cysts, Prostate, Dog

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Poster Presentation

Repeated Cystotomy Following to Recurrent Urethral Obstruction in a Persiantom-cat

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Case Description- 3- year- old, Persian tom-cat with recurrent urethral obstruction was presented to the clinic of faculty of veterinary medicinewith a history of cystotomy, 6 months ago due to urolithiasis.
Clinical Findings- Physical examination showed an enlarged urinary bladder that was painful when touching the abdomen. Patient had tachypnoea, tachycardia but no fever. Ultrasonography showed some soft tissue-like sediment in the bladder. Blood examination revealed increase inBUN, RBC, HCT, WBC and neutrophilia.
Treatment and Outcome- Trying to open the urethra by catheterization was unsuccessful, therefore through aceliotomy the content of the bladder was emptied and turbid urine was sent to urine analysis. Due to previous cystotomy, the ventral bladder wall was thickened, though the incision was performed on the apex of the bladder. After removing of some suspending soft tissue from the bladder, a catheter was conducted to the urethra from the incision site and urethra was flushed and obstruction was resolved. After vigorous irrigation of the bladder, the.incisions was closed routinely. Removed soft tissue was sent forhistopathologic examination. Antibiotic therapy was begun prior to operation and continued for 10 days. Urine analysis showed: protein 1+, blood 3+, pH reduction, presence of bacteria and increased WBC, RBC and epithelial cells. E.coli was isolated in urine culture.
Clinical Relevance- Urolithiasis is one of the most common causes of urethral obstruction that my need surgical intervention. Sometimes chronic cystitis that causes epithelial damage and detachment (such as this case) and some other urinary diseases can also cause

urethral obstruction that may not respond to catheterization, though it may need prompt surgical intervention.

Key Words- Persian Tom-Cat, Urinary Obstruction, Cystotomy

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Poster Presentation

6 Reports about the Occurerence and Treatment of Prolapsed Cloaca in Ostrich Chicks

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Case Description- Prolapsed cloaca at early ages occur for various reasons such as high amounts of estrogen in diet, consumption of foods with high fiber at early ages, drinking too much water in summer, and straining because of constipation due to lack of screes in food.the main resons for occurrence of this problem in the region are, feeding with alfalfa and clover at early ages, hot weather, lack of screes in breeding ostrich at house and lands with clay subs trate.

6 ostrich chickes that were under 4 months for various time intervals were referred to a private clinic of zabol province during the summer of 2013.

Clinical Finding- Protrusion of posterior portion and continuous straining of ostrich chicks were complain of ranchers.In clinical observations of chicks, to chicks had prolapsed of outside cell cloaca (orodeom) and in four other chicks prolaose with edema and severe inflammation in the area was observed.

Treatment and Outcome- After local anesthesia with lidocaine and cleaned and disinfected orodeom in cases with no edema and inflammation, after that cloaca area become oily by paraffin and was returned to the first place and finally in the area around cloaca purs-string suture was used.In other cases due to long over time after occurance of prolapsed, edema was removed by using of salt,then we attempted to modified prolapsed by cutting the outer edges of cloaca from both sides and simple single suture and purs-string suture were used for the sides of cloaca.Antibiotic therapy was prescribed by 20% oxy-tetracycline and flunexin meglumine to relive inflammation.

After studies on the etiology of lesion, the most likely diagnosis is hot weather, lack of screes in breeding ostrich at house and lands with clay subs trate.

Clinical Relevane- Since the last several years of ostrich farming in Iran is growing, Many studies have been done in the case where the breeding and disease. Unfortunately, these studies are very limited in surgery so Early diagnosis and surgical correction of the lesion can help protect animals and improve its performance.

Key Words- Prolaps, Cloaca, Ostrich

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Poster Presentation

A Rare Case of the None-metastatic Malignant Fibrosarcoma in a Female Terrier Dog: Report of Diagnosis, Surgery and Follow-up

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Case Description- Fibrosarcoma is a rare malignant tumor in dog that usually occurs in cutaneous and subcutaneous tissues. Fibrosacroma occurs most commonly in limb, but it may observe in oral cavity in dog. Surgery is treatment of choice for this tumor that followed by radiotherapy for reduction of tumor recurrence risk.

Clinical Findings- A7-year-old female terrier dog was referred with history of growing mass in right forearm to

a private pet clinic. Physical examination revealed a soft painless mass between radius and ulna bones. Radiography findings indicated a 3.5x2.5 cm soft mass without any invasion to the bone tissue. In addition, no metastasis to the lung was detected in plain radiography. CBC tests were normal and no inflammatory response was identified.

Treatment and Outcome- Tumor mass was excised surgically, fixed in 10% buffered-formalin, embedded in paraffin, and processed for routine hematoxylin-eosin (H&E) staining. Histopathologic analysis revealed huge cluster of fibroblast cells with relatively few collagen fibers. Neoplastic cells were majorly spindle-shaped with 1-2 prominent nucleoli. Malignancy criteria included marked hyperchromatism, anisocytosis, anisokaryosis, and mitotic figures (2/hpf). There was no necrosis on tumor section. Tumor was graded I on the basis of these criteria.

Clinical Relevance- The case was followed for one year. At time of writing this manuscript, there is no sign of tumor recurrence or metastasis. Our findings indicated if fibrosarcoma is diagnosed and surgically treated early, there is good prognosis for this tumor.

Key Words- Fibrosarcoma, Dog, Radius

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Poster Presentation

The Report Simultaneous Occurrence of Carcinosarcoma in two Littermate dogs' Mammary Gland an Prevent of Recurrence via Theranekron Administration

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Case Description- In spring 1392, two non-neutered dogs dachshund 4 years due to caudal abdominal and inguinal lump in the breast was referred to the clinic.

Clinical Findings- Determined in History that Dogs are triplets and the third dog was neutered before one year of age, and already it has been a breast lesion. Meanwhile, the mother dogs have a history of mammary tumors. Radiographs are essential to determine the exact location and number of lesions produced.

Treatment and Outcome- Ultimately tumor was removed surgically. The Carcinosarcoma was confirmed by histopathological studies. After surgery, both dogs were treated with prophylactic medication Theranekron (Tarentula cubensis extract). The re-evaluation of clinical and radiological again until 9 months after surgery, There was no sign of recurrence.

Clinical Relevance- Mixed mammary tumors, the most common cancer in female dogs older than 6 years the two forms of benign (70%) and malignant (30%) will occur. Causes are not fully understood, but hormonal changes have an important role in their formation. These tumors occur most pure breeds.

Key Words- Carcinosarcoma, Mixed mammary tumor, Theranekron, Dog

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Poster Presentation

Treatment of Supracondylar Fracture in a Growing Dog by Using Cross Pins

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Case Description- A three-month German Shepherd dog, weight 4 kg with clinical signs of open fracture and non weight-bearing lameness in the right elbow was referred to Shiraz University Veterinary hospital.

Clinical Findings- Open fracture was seen in distal humerus. For accurate Diagnosis craniocaudal and lateral radiographic views were taken. Distal Supracondylar simple transvers fracture was seen on radiographs and open fracture of the distal physeal humerous confirmed.

Treatment and Outcome- Surgical treatment was performed based on clinical and radiographic signs. The fracture was stabilized by applying cross pins and skin sutured in layers. Patient was administered for 7 days

with broad-spectrum antibiotics and the animal was reexamined. Radiographic features and fixation stabilization area was in good condition in a one week follow up.

Clinical Relevance- Condylar fractures appears to be common in growing dogs. Fixation by using cross pins in this type of fracture seems to be a good method in similar cases. Achieving favorable results needs restriction of animal activity post surgery.

Key Words- Supracondylar Fracture, Cross Pins, Fixation

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Poster Presentation

Ciliary Adenoma in a Dog: Enucleation and Histopathologic Diagnosis

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Case Description- A 1-year-old Terrier dog

Clinical Findings- A 1-year-old Terrier dog referred because of third eyelid protrusion caused by an extensive mass in the right eye.

Treatment and Outcome- Enucleation done and the mass were sent for histopathologic evaluation. Histopathologically, the tumor consisted of round and nonpigmented polygonal well-differentiated epithelial cuboidal cells forming tubuloacinar pattern. Mitotic activity was absent. Tumor cells showed eosinophilic cytoplasm and round to oval nuclei. There was no invasion to the surrounding stroma. Based on histopathology, the lesion was confirmed as a ciliary adenoma. In patients with glaucoma or intraocular haemorrhage with opaque media which makes direct observation of the tumor impossible, iridociliary epithelial tumors are suspected.

Clinical Relevance- Iridociliary epithelial tumors are occasionally seen in dogs but they are the second most common primary intraocular tumor in dogs and cats after tumors with melanocytic origin. They may arise from the pigmented or non-pigmented epithelial cells of the iris or ciliary body.

These neoplasms are more frequently diagnosed in dogs than cats. Clinically these tumors can present as white to dark brown or black masses, usually visible through the pupil in the posterior chamber; however, invasion through the iris or protrusion through the pupil can lead to a localized mass visible in the anterior chamber.

Key Words- Ciliary adenoma, Histopathology, Dog

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Poster Presentation

Adenoma of the Third Eyelid in a Dog: Histopathologic Diagnosis and Surgical treatment

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Case Description- An 8-year-old male mixed breed dog

Clinical Findings- An 8-year-old male mixed breed dog referred with protrusion of the third eyelid caused by a mass in the left eye.

Treatment and Outcome- The mass removed surgically and submitted for histopathologic evaluation. Histopathologically, the tumor consisted ofwell-differentiated tubular proliferation. The tumor cells resembled mature serous acini covered by low cuboidal epithelial cells with eosinophilic cytoplasm and round basal nuclei. No mitotic figure was observed. There was very little associated stroma.

According to the histopathology, the mass was diagnosed as an adenoma originated from third eyelid. Squamous Cell Carcinoma is the most diagnosed neoplasm of third eyelid in all species and in dogs. Other neoplasms include adenocarcinoma, melanoma, mastocytoma,

lymphosarcoma, fibrosarcoma and hemangioma/hemangiisarcoma.

Clinical Relevance- Removal of the affected area with a small margin of surrounding tissues by surgery is the treatment of choice, local recurrence may occur if the third eyelid is not completely removed. Neoplasms of the third eyelid are rarely seen in dogs. Third eyelid tumors are sporadically occurring, solid neoplasm with invasive behavior. Although ocular tumors constitute a very small portion of domestic animal neoplasms, they have great importance because they affect animal's vision. In this brief communication we describe a case of third eyelid adenoma in a dog.

Key Words- Adenoma, Third eyelid, Dog, Histopathology

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Poster Presentation

Subcutaneous Hemangioma in Two Captive Lion Cubs *(Panthera Leo)*

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Case Description- Hemangiomais a benign tumor of vascular endothelium. They are dermal or subcutaneous tumorsoccurring anywhere on the body. They are generally slow growing and are cured by complete excision. Reports regarding hemangoma in wild life species are relatively rare and are in a White Rhinoceros *(Ceratotheriumsimumsimum)* in vagina and a cutaneous one in a Giant Panda *(Ailuropodamelanoleuca)*. In this brief communication we report two rare cases of subcutaneous hemangioma in two lions.

Clinical Findings- Two captive lion cubs referred because of palpable subcutaneous masses on the back of the neck andataxia since early days after birth.

Treatment and Outcome- The masses surgically removed and sent for histopathological evaluation. The specimens fixed in 10% neutral buffered formalin, embedded in paraffin, cut at 5 µm and routinely stained by Haematoxylin and Eosin stain.

Histopathological examination revealed proliferation of small blood vessels in a loose and edematous stroma. There were multiple, thin walled, dilated vascular spaces in the dermis. Based on gross and microscopic findings, the lesion was diagnosed as hemangioma. To our knowledge, this is a rare report of hemangioma in the lion cub.

Key Words- Subcutaneous hemangioma, Captive lion cubs

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Poster Presentation

Surgical Treatment of Lateral Tympanic Cavity Pus Caused by Escherichia Coli Bacteria in Five Red Eared Slider Turtle

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Case Description- Five red-eared sliders at the age of 1 to 4 years old were presented with history of abscess formation at the base of the auricular area becoming larger over time.

Clinical Findings- On general examination, the vital parameters were within normal in all cases. A ventrodorsal (VD) radiograph of the head was taken and asymmetric infected middle ear was diagnosed. 4 cases showed an ipsilateral infection where contralateral swelling in region of the tympanic scute was found in one case

Treatment and Outcome- Surgical incision was performed and pus was exited from lateral tympanic cavity.Earswap was cultured and found e-coli bacteria. Etiology of ear infection in these five case from fecal bacteria that there in turtle water. Medical therapy and routinely water change (a day) was described. In one case given the failure of the first attempt with the medical therapy alone after surgery, water change was selected in order to improve.

Clinical Relevance- Chelonian has no external ears. The visible part of the chelonian ear is formed by a layer of simple undifferentiated skin which forms the tympanic membrane. In the case of infection of the middle ear, pus is generally located in the lateral part of this chamber. For prevention, it is recommended the turtles must be provided access to a clean water source.
Key Words- Red eared slider, E-coli, Auricular abscessation

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Poster Presentation

Surgical Management of Bilateral Pododermatitis (bumblefoot) in two Roosters

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Case Description- Two 2 and 3-year-old roosters were referred with swelling and abscessation of the plantar surface of both limbs.
Clinical Findings- The roosters were in a non-weight bearing position on limbs. Clinical examinations revealed scab formation, hyperkeratotic reactions, subsequent dermatitis and cellulitis leading to swelling and abscessation of the plantar surface of both legs. Radiographic evaluations showed a minimal articular involvement. Caseous form of pododermatitis type III was diagnosed in one with accumulation of necrotic debris, and serous form of type III with edema and hyperemia of the tissues was confirmed in the other one.
Treatment and Outcome-The birds were anesthetized with IM injection of ketamine 30 mg/kg and received oxygen via a face mask. A tourniquet was placed around the lower part of the tibiotarsal bone to prevent profuse bleeding. Surgery was done at debulking the infection, removing all caseous debris, infected and fibrotic tissues following routine preparations. The lesions left open to be healed by a secondary intention healing. In order to reduce the pressure from the surgery sites, doughnut-shaped rubber pads were bandaged to the legs to keep the surgery sites clean and away from potentially contaminated surfaces. The bandages left in place for 2 weeks. Oral enrofloxacin and vitamin A supplement were administered for 7 days. Providing a padded perch was recommended. Follow-up study revealed a satisfactory healing with no complication after 4 weeks.
Clinical Relevance- Improper and unhealthy perching conditions can result in bilateral pododermatitis in birds. Surgical intervention is necessary in severe cases (type III and IV) and is approximately of good prognosis.
Key Words- Bilateral pododermatitis, Rooster

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Poster Presentation

Herniation of the Intestinal Loops into the Scrotum of a Guinea Pig; First Report in Iran

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Case Description- A three-year-old male guinea pig was referred to our clinic with sign of severe bruising and swelling of scrotum. The appetite and defecation were also decreased according to the owner statements.
Clinical Findings- The patient was depressed but body temperature and mucosal membrane were normal. Pain and swelling were detected in palpation of left scrotal region. Ultrasonography was performed and revealed intestinal herniation into the scrotum.
Treatment and Outcome- Following routine clipping and surgical preparation of the scrotum a single 1 cm incision was made at the distal tip of the scrotum. The incision was extended through the tunic on each side of midline to allow exteriorization of testicles. After orchidectomy, intestinal loops were completely obvious and pushed into the abdominal cavity through the inguinal canal. The inguinal rings in both sides were

partially closed to minimize the risk of reoccurrence. The tunic closed using a 3-0 synthetic, absorbable suture. The skin incision left open to heal by second intention. Amikacin was prescribed q24h, S.C for 5 days. After two weeks, complete recovery was observed. Six months following surgery, no abnormality was detected.

Clinical Relevance- The inguinal canals of rodents remain open and a functional cremaster muscle allows the testicle to migrate into and out of the abdominal cavity and it may prone rodents to develop scrotal hernia. To the best of our knowledge, this is the first report of scrotal hernia in guinea pig in Iran.

Key Words- Scrotal hernia, Ultrasonography, Guinea pig

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Poster Presentation

A Report on Adenosarcoma in the Stomach of a Terrier Dog Having Unsuitable Diet

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Case Description- Adenosarcoma is one of the most common malevolent tumors in gland tissues and usually occurs in dogs over 8 years old. The tumor is found in tissues like stomach and its lymphatic glands, liver, spleen, esophagus, lung and so on… but it attacks the gastrointestinal part of dogs. The reason behind the disease is quite unknown but unsuitable diet, genetic and racial predisposition is influential.

Clinical Findings- A 9 year- old Terrier dog was taken to a clinic in fall 2013 due to pain in abdominal area and blood vomiting, constipation and dark feces. It was found that the animal has repeatedly eaten sausages as well as human and animal canned foods for years.

Treatment and Outcome- The dog continued its natural life 4 months after the surgery but euthanasia brought an end to its life after the disease returned and its internal tissues were affected.

Clinical Relevance- Laboratory finding revealed the animal's anemia and that its liver enzymes have increased. The contrast material radiography depicted a tumor in the dog's antrum of pylorus with a possible incomplete obstruction in its duct. The dog was further studied under exploratory Laparotomy to find out the level of the injury.

Gastrojejunostomy was later conducted because of the extended level of the injuries and pylorus region's obstruction. The tissue sample went under histopathology after fixing and Adenosarcoma was ultimately confirmed.

Key Words- Adenosarcoma, Cancer, Stomach, Dog

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Poster Presentation

Report of Pectus Excavatum with Streptococcus Pneumonia in a Pekingese Puppy

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Case Description- 25 days old pekingese puppy with the clinical sign of dyspnea and anorexia referred to specialized veterinary polyclinic of Islamic Azad university science and research branch.

Clinical Findings- Clinical examination suspected for malformation of thoracic cavity, for confirming this finding, standard radiographs were taken. The lateral radiograph showed a mild elevation of sternum, mixed pulmonary pattern, plural effusion and the cardiac shadow was lost.

Treatment and Outcome- Despite of oxygen therapy and usage of bronchodilator drugs and administration of antibiotics it didn't survive due to sever dyspnea. Pathological finding showed depression of sternum with depth of 5 mm which is confirm pectus excavatum, diaphragm was normal, mild hydrothorax was seen in case of persistence of 5 cc modified transude. Mild adhesion of serosal layer of lung and pericardia with plural was seen. Left lung lob and right cranial lung lobe was hepatized.Sitology and microbiology of hydrothorax and lung tissue was showed inflammatory cells and streptococcus pneumonia was isolated.

Clinical Relevance- Pectus excavatum (PE) is a deformity of the sternum and costocartilages that results in a dorsal to ventral narrowing of the thorax. Synonyms for pectus excavatum include funnel chest, chondrosternaldepression, chonechondrosternon, koilosternia, and trich terbust. The cause or causes of PE in animals are unknown. Theories proposed include shortening of the central tendon of the diaphragm, intrauterine pressure abnormalities, and congenital deficiency of the musculature in the cranial portion of the diaphragm. Abnormal respiratory gradients appear to playa role in the development of this disease in some animals because brachycephalic dogs are most commonly affected, many of which have concurrent hypoplastic tracheas.It seems that the pneumonia due to death rather than pectus excavitum alone.

Key Words- Radiography, Pectus excavatum, Streptococcus, Pneumonia

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Poster Presentation

Unilateral Persistent Tunica Vasculosa Lentis/ Persistent Hyperplastic Primary Vitreous (PHTVL/PHPV) in a German Shepherd

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Case Description- A2-month-old female German shepherd was presented with a history of ocular discharge and corneal opacity to the Veterinary Teaching Hospital of Shiraz University.

Clinical Findings- On ophthalmic examination the right eye was slightly buphthalmic with corneal edema, vascularization and fibrosis while the left eye was normal in size with a deep corneal ulcer and corneal fibrosis. Fluorescein dye staining was negative for right eye whereas positive for left eye. Complete ophthalmoscopic examination of the right globe was not possible because of the edema and fibrosis so ultrasonography was performed immediately using a Sonoscape (A6 Vet) system with a 5-11 MHz linear transducer. Measurements were taken in the dorsal and sagittal planes. The posterior surface of the lens appeared hyperechoic. Behind and attached to the lens a triangular-shaped echogenicity was seen which continued as a tubular hyperechoic structure to the optic disc. The left eye was normal ultrasonographically.

Treatment and Outcome- Unilateral PHTVL/PHPV cases do not require treatment, but bilateral cases with visual impairment may need to be treated. Surgical success rates for restoration of vision have historically been low, and in the pre-phacoemusification era, intracapsular lens extraction with anterior vitrectomy and excision of the hyaloid artery surgically has been recommended for cases of bilateral PHTVL/PHPV causing blindness.

Clinical Relevance- PHTVL/PHPV are rare congenital eye diseases in the dog characterized by hyperplastic parts of the hyaloid system and the primary vitreous persisting postnatally that leading to cataract.

Key Words- Dog, Persistent Hyperplastic Primary Vitreous, Ultrasonography

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Poster Presentation

Reports of Cutaneous Wound Healing Caused by Hexamita in Discus Ornamental Fish

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Case Description- In November 2013, two pieces of fish Discus with severe depression signs of discoloration and darkening of the body, loss of appetite, exophthalmia and also perforated and necrotic lesions on the head and flank was referred to the clinic.

Clinical Findings- Sampling and bacterial culture for the diagnosis of pores do damp and heavy infestation of protozoa was Hexamita.

Treatment and Outcome- To treat the fish with a solution of ketamine (80 mg/1lit) were unintelligent and out of the water. Necrotic spots and lesions of the skin

surface being debridement then it was washed dilute Betadine and infusion of metronidazole (500mg/100cc). Finally, a week long bath concentration of metronidazole 6mg/lit were used as water-soluble. Given the thinness and poor nutritional status, previous and also not wanting to eat, fish daily multivitamin + amino acid powder with liquid food with the oral tube was fed. After a period of treatment the fish swimming activity (after seven days) to return to normal.

Clinical Relevance-It can be observed that providing the right conditions, such as adequate ventilation, proper filtration, timely replacement of water and nutrition, to prevent it became corrupted by Aquarium. Hexamitiasis is a parasitic disease that can affect both farmed and aquarium fish, which is caused by Hexamita and Spironucleus.

Key Words- Wound healing, Hexamita, Fish, Discus

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Poster Presentation

Skin Neoplasm Excision in a White Tiger (Panthera Tiger) – A Case Report

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Case Description- An 8 year-old captive white tiger (Panthera tigiris), keeping in Tehran Oghab Circus

Clinical Findings- evaluated for a progressive mass on the right side 10 centimeters ventral from the 12th thoracic vertebra. The mass had about 2 centimeters radius with irritation and mucoid discharge.

Treatment and Outcome- The growth was surgically excised and histopathological examination revealed a Papiloma. The case showed two mass growth at 10 centimeters further ventraly 10 months after excision. One bigger with about 3 centemeters radius and a small-about 2centimeters radius near the bigger. Histopatholoical examination revealed Fibroma and ulcerative lesion with small, uniform, dense, oval nuclei and amorphous eosinophilic material for both second skin growth.

Clinical Relevance- Food intake and general health of the animal showed improvement after mass excision. Radiography of thorax before first and second mass detection did not show metastasis in lung tissue. No chemotherapy was administered for the case until now which is 5 months after second surgery and no tissue regrowth is seen. Otherwise it would be administer if Histopathology was reported a malignant neoplasia.

Key Words- Bengal Tiger, Papiloma, Fibroma, Histopahology, Mass excision, Iran

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Poster Presentation

Surgical Repair of Tibial and Fibular Multiple Diaphyseal Fractures in a Wild Sheep (*Ovis Orientalis Arkal*)

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Case Description- A 2.5-year old wild sheep was referred with a history of being hit by car.

Clinical Findings- The sheep was in a non-weight-bearing position on his right hind leg. Radiographic examination revealed multiple fractures in the tibia and fibula.

Treatment and Outcome- Following food withdrawal and fluid therapy (Ringer's lactate solution) the sheep was premedicated with xylazine, induced with midazolam-ketamine combination and maintained with propofol (0.2-0.3 mg/kg/min-CRI).The patient was intubatedand recieved oxygen during operation. Following inductionlumbosacral epidural analgesia (combination of 2% lidocaine & 0.5% bupivacaine- 0.2 mL/kg) was performed. Using a craniomedial approach after routine surgical preparations and consequent to the anatomic alignment of the fracture segments by bone holding clamp and forceps, lag screw and neutralization

plate and screw (on medial surface of tibia) techniques were used to achieve an anatomical reconstruction. Postoperative radiograph revealed an excellent reduction of the fracture. Cage rest and restricted activity was accomplished for 6 weeks. Penicillin 30000 IU/kg and ketoprofen 3 mg/kg were administered preoperatively and continued for 5 days. Postoperative follow up revealed no complication and the sheepwas allowed to return to its domain area of wilderness four months after surgery.

Clinical Relevance- A combination of different fixation techniques with a satisfactory protocol of anesthesia can result in successful fracture repair in wild animals.

Key Words- Tibial and fibular fracture, Wild sheep

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Poster Presentation

Anal Atresia with Rectovaginal Fistula in a Female Afghan Hound Puppy

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Case Description- Congenital anomalies of the rectum and anus are rare in dogs. The most frequently reported anomaly is *atresia ani*. A female Afghan hound puppy was presented to Veterinary Teaching Hospital of Faculty of Veterinary Medicine, Shahid Bahonar University of Kerman. The history included voiding of feces through the vulva.

Clinical Findings- Anorexia, depression, and presence of watery feces in vaginal canal were observed in clinicalexamination. In lateral abdominal radiography megacolon was observed.

Treatment and Outcome- The surgical repair was performed. The anal site was opened, the rectum released and pulled backward and sutured to the anus. The fistulous tract was trasnsectd, isolated and repaired through the anus. After mucosal closure the skin was also sutured.

Clinical Relevance- After surgical correction, antibiotic was administered for 5 days (ceftiriaxone 30 mg/kg, sid), dexamethasone and laxative were also administrated. After 1.5 year the dog is completely healthy and the only complication was fecal incontinence.Animals with *atresia ani* type II and III that are unable to defecate if not treated surgically will die because of bowel stasis. Anoplasty is the most common procedure performed. The aim of surgery is to restore anorectal continuity, to preserve the external anal sphincter, to preserve or restore colonic function.

Key Words- Afghan Hound, Anal atresia, Rectovaginal fistula

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Poster Presentation

Unilateral Cryptorchidism in an Adult dog: Case Report

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Case Description- Cryptorchidism occurs when one or both testicles fail to move into the scrotum prior to birth. The testicles develop before birth in the abdominal cavity and normally descend into the scrotum by approximately 10 day after birth. Cryptorchidism by definition suggests a hidden testicle: a testicle that is not within the scrotum and cannot be manipulated into the scrotum by several months of age.A5 year oldterrier male dog was referred to the surgery ward of veterinary hospital of Tehran university complaining of existence of only one testis.

Clinical Findings- The right testicle could not be detected by visual examination and careful palpation of scrotum and inguinal area. Abdominal ultrasonography and clinical examination demonstrated abnormal intra-abdominally placement of Right testicle, caudal to right kidney near the abdominal aorta. It was noticeable that

the echo texture of the testicle has been changed and atrophied.
Treatment and Outcome- Bilateral castration is the choice treatment. Castration of the remain testis was performed in a close prescrotal manner and exploratory laparatomy was performed for removal of the intra-abdominal testis. The retained testicle was found on the caudal aspect of the right kidney near the bladder. The adhesion between the kidney and the testis was carefully removed. Dactus deferens and vascular cord were ligated individually and were transected.
Clinical Relevance- Crypthorchidism, a sex limited autosomal recessive trait, is more common as a unilateral condition. Cryptorchidism is an important risk factor for the development of testicular tumors, causing a 26-fold increase in the risk for certoli cell tumors and a 15-fold increase for seminomas.
Key Words- Cryptorchidism, Testis tumors

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Poster Presentation

Critical Management of Traumatic Pneumothorax in 24 Cats Without Penetrating Chest Wound.

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Objective- In posttraumatic closed pneumothorax, rapid clinical assessments and reasonable trapeutic procedures may be determinative.This study try to evaluate efficacy of nonsurgical conservative treatment and thoracocentesis on successful rate in feline blunt chest trauma.
Design- Retrospective case series (May 2010 – February 2014)
Animals- 25 domestic short hair cats with age in range 5 to 46 months
Procedures-Case files and recorded data ofcats presenting dyspnea with no signs of skin wound observed and has trauma in history were collected and analyzed. History and clinical findings such as mucus color, respiratory rate and pattern, hemoglobin saturation, noninvasive blood pressure, electrocardiography, level of conciseness compared with blood work, and radiology as determination of free air in thoracic cavity. Results of oxygen supplementation, drug administration and thoracocentesis compared. Correlation with initially physical examination, results of diagnostic assessments, efficacy of therapeutic methods and final outcome were evaluated.
Results- Hyopxemia was consonant with clinical findings but not reactive to oxygen supplementation in more than 80% of cases. Mean air aspirated in first thoracocentesis was 23.6. Although 28 % of population had hemothorax concurrently, but laboratory findings could revealed it just in 8% of cases. 24 hours intensive care and repeated radiology showed 88% of patients have survived.
Conclusion and Clinical Relevance- Thoracocentesis has priority to diagnostic and other trapeutic methods and cats could tolerate it without anesthesia. According to findings volume of air that could aspirate dose not related to severity of pneumothorax which shown in radiograph.
Key Words- Pneumothorax, Thoracocenthesis, Cat, Trauma

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Poster Presentation

Simultaneous Existence of Pyometra, Ovarian Cysts, Urolithiasis, Cystitis, and Mammary gland tumor in Guinea pig, Case Study

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Case Description- A 5 year Old female guinea pig with a mass on right side of the inguinal region and history of anorexia and lethargy.
Clinical Findings- Clinical signs: a mass on mammary gland, hematuria and alopecia. Primary diagnosis: mammary gland tumor, urolithiasis, hydrometra/ mucometra/ pyometra, and cystic ovaries. Ultrasonographic evaluation confirmed cystic ovaries, cystolithiasis, thickening of the bladder, and luminal free fluid and increased diameter of uterine horns.
Treatment and Outcome- Decision: mastectomy, ovariohysterectomy, and cystotomy. After basic prepration of the surgery site at dorsal recumbency, an incision centered midway between the umbilicus and pubis was made. Ovariohysterectomy was performed the same as in carnivorous. The incision was extended to perform cystotomy. Bladder was exteriorized and incised. Stones were removed and an intravenous catheter (gauge 20) was passed from the neck of the bladder into the urethra to confirm the patency of the urethra. Cystotomy and lina Alba closure were performed. Finally, an elliptical incision of the skin was performed and all mammary tissue on that side was excised. It was papillary adenocarcinoma based on histhopathologic report. One month later, the owner came with recumbent animal which couldn't survive. Kidney and lung sample were obtained and sent to histhopathology department. Interstitial pneumonia in addition to focal tubular necrosis and fibrosis of the kidney were detected.
Clinical Relevance- Guinea pigs are suspected to many diseases such as mammary gland neoplasia, pyometra, ovarian cysts, and cystic calculi, some are rare while others are frequent; however, simultaneous presence of all of the aforementioned problems in one animal has never been reported.
Key Words- Guinea pig, Pyometra, Ovarian cyst, Urolithiasis, Cystitis, Mammary gland tumor

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Poster Presentation

Surgical Correction of Partial Obstruction of the GI Tract with Concurrent Duodenojejunic Intussusception in a Dog: A Case Report

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Case Description- Gastrointestinal obstruction is a fairly common condition in dogs. Ingested foreign bodies are a common cause of this phenomenon. Objects mostly become lodged within stomach or intestines and require gastrostomy or enterotomy. Tending to be indiscriminate eaters, young dogs are generally at high risk. Clinical signs commonly include vomiting or regurgitation, anorexia, abdominal pain, drooling and dehydration.
A six-month-old female Terrier puppy was referred to veterinary hospital with a three-day history of vomiting and anorexia.
Clinical Findings- Clinical examination showed tachycardia, dehydration and pain in abdominal palpation. Hematological evaluation demonstrated a mild neutrophilia. Abdominal radiographic findings revealed two small intestinal metallic foreign bodies.
Treatment and Outcome- Following surgical preparation, by a midline celiotomy incision the intussusception was detected and manually reduced. By two incisions, enterotomy, gastrotomy, enteroenteropexy and omental patching were performed. Subsequently, the patient was off-feed for 24 hours and fluid-therapy for 1 day and antibiotics for 7 days were prescribed. Radiological and hematological examination proved to benormal on follow up 10 days after the operation.
Clinical Relevance- Although some foreign bodies are small enough to pass through the intestine, many require surgical intervention. Diverse procedures could be performed to remove foreign bodies from the GI tract. In the current case, due to location of the object in esophagus, stomach, duodenum and jejunum along with formation of an intussusception in duodenojejunal junction, surgery was considered as the treatment of choice. It is important to dissuade dogs from scavenging to reduce the risk of ingesting inappropriate items.
Key Words- GI obstruction, Foreign body, Intussusception, Dog

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Poster Presentation

Diagnosis and Treatment of Egg Binding in Three Green Iguana - Iguana Iguana

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Case Description- Three, mature, female and green Iguana (iguana iguana) were individually and separately diagnosed with egg bindings.
Clinical Findings- Palpation and radiography reveal lobulated space-occupying masses in the caudal abdomen. Which were in different sizes in each case. All cases had poor housekeeping condition.
Treatment and Outcome- Lack of proper diet, less than optimum environmental temperature and improper light sources were the main reasons for egg binding in cases 1 -2 years old-and 2-3 years old. Case 3 -3 years old - had good keep condition. The average time of gestation in cases was 70 days. Depression, inactiveness and less appetite were symptoms for diagnosis. Hematology did not perform for any of cases. None responded to oxytocin 1 IU/kg. Case 3 had good condition but died 48 3 days after diagnosis. Cases 2 and 3 were treated by spaying – ovariosalpangectomy.
Clinical Relevance- Egg binding in green iguana needs early attention and change in husbandary deficits. Prediction of achievement to successful breeding with use of medication is more important thing to not to miss golden time for successful surgical treatment.
Key Words- Egg binding, Ovariosalpangectomy, Tehran, Iran

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Poster Presentation

Surgical Treatment of Keratitis Nigrum with Keratectomy and Conjunctival Pedicle Graft in 8 Cats

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Objective - To evaluate complications and outcomes of similar feline corneal sequestration. Which surgically corrected by deep keratotomy and conjuctivial pedicle graft
Design- Retrospective case series (June 2012– March 2014)
Animals- 8 Adult Persian cats with corneal mummification and chronic ulceration which was non responsive to medical therapies
Procedures- All cats has central corneal lesion with superficial ulceration around .In 75% of cases blepharospasm and epiphora observed. Corneal vascularization in 50% of cases detected. Mean of duration time of clinical signs till surgical operation was 6.6 months.Corneal sequestration did not slough spontaneously in any cases. Operation accomplished by thin layer including corneal wounds edge resection undersinhalation anesthesia. In 37.5 % of cases, anterior chamber exposed due to extension of sequestra to Descemet's membrane and closure of cornea achieved by interrupted sutures on corneal wound edges. The aoutograft harvested by dorsal margin of limbus conjunctiva with valuable pedicle and turned to corneal ulceration site and sutured by a semicircular pattern. Post-operative topical antibiotic administrated for one week.
Results- Except one case for a 4 months short period all cases has positive response to surgical correction but 25% of cats has relapse of corneal sequestration which had not full thickness keratectomies after approximately 5 months .One of those operation which anterior chamber exposed , failed after 3 weeks and descemenocel with sever corneal edema. Intra ocular pressuredid not measured before and after in all cases but in 37% of cases which had done, there were no significant changes after surgical operation.
Conclusion and Clinical Relevance- Deep keratectomy may have advantages in treatment of chronic keratitis nygrum , but in case of descement membrane attachment

, prognosis should evaluated conservative , and making conjuctival grafts as a protective layer should improve the chance of better corneal healing.

Key Words- Keratitis nygrum, Corneal necrosis, Conjuctival graft, Cat

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Poster Presentation

Plastron Osteotomy and Ectopic Egg Removal via Cyctotomy in A Red Ear Slider Turtles (*Trachemys Scripta Elegans*)

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Case Description- A mature - 6 years old-, female, red-eared slider turtles (Trachemys scripta elegans) called Bianka,
Clinical Findings- Anorexia, constipation and urination blockage were daignosed as egg binding. Radiography revealed a large mass in distal one third of the celomic cavity in pelvic region which could be a urolyth or an incomplete egg.
Treatment and Outcome- Celiotomy was performed via plastron osteotomy approach. A mass were detected in the bladder and removed with cyctotomy incision. Size of mass: 2×2 centimeters. The turtle had normal urination and defication 3days after operation. She received one week postoperation antibiothic therapy.
Clinical Relevance- Histopathology revealed more than 50 percent Ca in removed thing from the bladder which means it was egg. A control radiography 2 months after surgery showed no remaining or abnormality in celomic cavity.
Key Words- Ectopic egg binding, Red ear slider turtles, Trachemyscripta elegans, Cyctotomy, Plastron osteotomy

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Poster Presentation

Traumatic Diaphragmatic Hernia in A Dog and Its Surgical Treatment: A Case Report

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Case Description- Diaphragmatic hernia (DH) occurs when the continuity of the diaphragm is disrupted so the abdominal organs can migrate into the thoracic cavity. DH can be due to congenital defects or may occur secondary to trauma. Traumatic diaphragmatic hernia occurs more often in small animals. Historically, young males are more commonly affected.
A stray dog was referred to veterinary hospital with history of car crash.
Clinical Findings- Clinical examinations showed paleness, tachypnea, and crepitation sound in left radius and right shoulder. Abdominal radiographic findings demonstrated intestinal gas and a part of liver within the thoracic cavity.
Treatment and Outcome- Following returning the patient to the stable condition**,** ventral midline abdominal incision was made. Hernia was detected, and the abdominal organs were replaced to their normal position. Subsequently the diaphragmatic defect was closed in simple continuous suture pattern and the remained air was removed from the pleural cavity. The patient was monitored postoperatively for hypoventilation.
Clinical Relevance- Chronic diaphragmatic hernias may have a higher mortality rate than acute diaphragmatic hernias. Reported mortality rate for animals with traumatic diaphragmatic hernia have varied from 12% to 48%. If the animal survives the early postoperative period, the prognosis will be good or excellent and recurrence will be uncommon with proper technique.
Key Words- Diaphragmatic Hernia, Respiratory abnormalities, Thoracic cavity

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Poster Presentation

A Case Report of Mid-shaft None Union Radius and Ulna Fracture in a Hawk Treated with IM Pinning and Orthopedic Wires

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Case Description- A Red tailed hawk was referred to Urmia University's Veterinary Teaching Hospital with a two months history of trauma in right wing by unknown cause(s).
Clinical Findings- Upon physical examination, open fractures of both right radius and ulna were obvious. The hawk was administered fluids and received pain killers and antibiotics, and a bandage was put on the wing. On the following day, when hawk's condition was stable, radiographs were taken and prepared for surgical repair. The radiographs confirmed comminuted mid-shaft hypertrophic none union fractures.
Treatment and Outcome- Under general anesthesia, after exposing the fractured site the hypertrophic ends were curettaged and removed. Then the radius and ulna stabilized using IM pins. One retrograded IM pinfor the ulna and in the radius a trans-cortical IM pin was utilized. Also to stabilize fractures against rotation and shear forces an 8-figure hemicerclage wire was used on ulna.Postoperative anti-inflammatory and antibiotics were administered for 5 days. The hawk maintained an excellent appetite during the recovery period. Four weeks later, the clinical union occurred and the range of motion in the elbow and wrist joints was found to be normal.
Clinical Relevance-The prospect of full recovery following repair of avian bone fractures often is poor and the complication rate is high. Application of IM pins and orthopedic wires is familiar to most veterinarians and requires little specialized equipment and inexpensive. They provide axial alignment and bending stability, and require minimal tissue exposure for insertion.
Key Words- IM pinning, Hawk, Mid-shaft none union fracture, Radius and ulna

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Poster Presentation

Ventriculotomy in Two Parrots and a Common Myna

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Case Description- A one –year old common Myna (*Acridotherestristis)*, a two-month old Alexandrine Parakeet and a three-year old Grey African were referred to Veterinary teaching hospital, School of Veterinary Medicine, University of Tehranfor history of foreign body ingestion in three different periods of time. On physical examination the Myna and Grey African were normal but the owner of Parakeet indicated lethargy and anorexia.
Clinical Findings- Survey radiographs of birds were taken. Lateral and ventrodorsal radiographs of common Myna showeda metal foreign body within the body with its distal end seemingly in the ventriculus and its proximal end extending to the right pectoral region pointing to the right shoulder joint. Radiographs of the Parakeet showed a long, tube-like foreign body which proximal end was in esophagus starting dorsal to the syrinx, cross proventriculus and ending in ventriculus. Survey radiographs of the Grey African showed a metallic ball-like foreign body in ventriculus.
Treatment and Outcome- We decided to remove all these foreign bodies through a ventral midline celiotomy. All birds were given Ringer's solution (50 ml/kg SC) and anesthetized with isoflurane (1%-3%; Isoflurane) and oxygen and placed in dorsal recumbency with their heads raised about 30 degrees on a heating pad. The wings were reflected dorsally while the legs were restrained and abducted in caudal direction. Feathers on the incision site were plucked. Skin was prepared for aseptic operation using Povidone iodine solution and alcohol and draped at the level of operation field. The skin and lineaalba were

incised separately. We packed off the abdomen behind the ventriculus with saline-soaked gauze to minimize the effect of leakage. An initial stab incision was made which was extended (when was necessary) with Metzenbaum scissors. After removal of foreign bodies, the ventricular incisions were sutured in two continuous layers (opposed, then Cushing) with 4/0 Vicryl. Then the lineaalba and skin were closed separately by a simple continuous suture pattern using the same suture material. Recovery was uneventful in mentioned birds.

Clinical Relevance- Foreign body ingestion have been reported in a variety of birds, including companion birds, zoo birds, poultry and ostriches, and birds in the wild. Foreign bodies are most commonly found in crop, proventriculus, or ventriculus, although linear foreign bodies can extend into intestines. The approach to ventricular foreign bodies in birds is affected by the nature of the foreign body, the clinical signs, the available tools, and preference of the surgeon. Although ventriculotomy is generally avoided, in view of the highly muscular walls (the physiological muscular activity can pull sutures out of the tissue) and the inability to form an inversion closure (Forbes, 2002), because of the nature of the foreign body and available tools, ventriculotomy was performed. The results suggest ventriculotomy as a reasonable alternative option.

Key Words- Ventriculus, Ventriculotomy, Foreign Body, Bird

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Poster Presentation

Report of Fibrosarcoma in the Finger Numb "4" of the Left Hand in a Cat

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Case Description- A12-year-old female neutered Scottish Fold cat was presented with signs of inflation, large and tightens the finger numb "4"of the left hand.

Clinical Findings- On physical examination, a hard mass was palpated on the Dorsal and palmar hand full grown and animal cannot gain weight on the left hand.

Treatment and Outcome- All mass indexes the finger numb "4"during surgery with radical method and complete excision and skin were closed grafting to the area. Specimens sent to the pathology laboratory and on the results, Fibrosarcoma was diagnosed. Now the situationis favorable animal.

Clinical Relevance- According to one study, the animal life in Fibrosarcoma finger in the absence of metastatic disease has been reported inapproximately73days. Fibrosarcomas are relatively low in malignancy, growing slowly and generally not spreading to other organs, though they do aggressively invade other tissue and bone that is near them. The most common location for a Fibrosarcoma of the mouth is in the gums (gingival).

Key Words- Fibrosarcoma, Mass, Cat

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Poster Presentation

Report of Dog with Hemangiosarcoma in Spleen

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Case Description- A13-year-old female neutered Terrier dog was referred to Small Animal Clinic with symptoms of abdominal distension, anorexia, weakness and pale mucous membranes.

Clinical Findings- On physical examination, radiograph study and hematology tests, enlarged spleen and anemia were observed.

Treatment and Outcome- The patient was treated with supportive and biopsy of spleen was and sent to the

pathology laboratory. Enlargement of the spleen was diagnosed Hemangiosarcoma but pet owners, despite the recommendations of themedical staffdid notattempt tosurgicallyremove the spleenof animals. Shortly after, the animal with enlarged spleen was brought back to the clinic and the entire spleen was removed during surgery that did not last very long.

Clinical Relevance- Hemangiosarcoma (HSA) is an aggressive, malignant cancer of the blood vessels that often grows as a mass in the spleen, liver, or heart, but can also be found in other parts in the body. The main way to treat the dogs with HAS is splenectomy. It has been estimated that 25% of dogs with splenic Hemangiosarcoma also have a heart-based Hemangiosarcoma. In one study, long-term survival in patients with splenomegaly and HAS, 65 days has been reported.

Key Words- Hemangiosarcoma, Splenectomy, Spleen, Dog

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Poster Presentation

Report of Lymphomas in the Right Ear in a Cat

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Case Description- A 5-month-old female neuteredScottish Fold cat was referred to Veterinary Clinic with symptoms of weight loss, fever, and change invoice, sniffing, sneezing and shaking head.

Clinical Findings- The clinical examination of the animal and radiographic examination of the situation right ear, middle ear polyp slinked to throat had been diagnosed.

Treatment and Outcome- Polyps were completely removed during surgery and sent to the laboratory. Polypsofdiameter0.5 cm and a length of 2 cm were measured. Based on pathology laboratory results, lymphomas diagnosed. Now the general condition of the animals is desirable.

Clinical Relevance- Lymphoma is the most common form of cancer in cats, which is often associated with feline leukemia virus, and accounts for 25 percent of all cases. If diagnosed and treated early, lymphoma often can be well-managed.

Key Words- Lymphomas, Polyps, Cat

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Poster Presentation

Reportof Mast Cells Tumor in the Skin of Right Hand in a dog

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Case Description- A8-year-oldmaleneuteredTerrier dog was presented with scar between the fingers of the right hand to the penetration of foreign bodies and the pile grows claws of Dorsal, hair casts and hypertrophy of the skin in Palmar.

Clinical Findings- After physical examination and history taking, the entire mass was removed surgically and sent to the laboratory. According to lab results was diagnosed a tumor Mast Cell.

Treatment and Outcome- Despite advice to pet owners, the action did not hand cut and 6 months later the animals with tumors involving the entire skin area with a lot of pain and discharge from the skin was referred and in this phase completely disconnected from the shoulder area.Now the animal has been reported ideal.

Clinical Relevance- Mast cell tumors are formed when there is an increased proliferation of these cells that is not controlled by normal mechanisms. The higher the grade, the more aggressive and more advanced the cancer. Treatments include surgical excision of the tumor, radiation therapy, chemotherapies, and supportive care.

Key Words- Mast cells tumor, Scar, Dog

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Poster Presentation

Comparison the Effect of Anaesthesia by Means of Atropine-pentobarbital Drug Combination and Atropine-Acepromazine-pentobarbital Drug Combination on Counting White Blood Cells in Hedgehog

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Objective- Comparison of the effect of anaesthesia by means of Atropine-pentobarbital drug combination and Atropine-Acepromazine-pentobarbital drug combination on counting white blood cells in hedgehog
Design- Experimental Study
Animals- 6 female hedgehogs were in two separated groups.
Procedures- In this study, we compared effect of two groups of anaesthesia drug on amount of total white cell concentration (TWCC) in six female hedgehogs.The first group includes Atropine-Acepromazine-pentobarbital in three hedgehogs and the other group includes Atropine-pentobarbital in other hedgehogs. Then we cupped from jugular vein before and after anaesthesia. The blood was poured into the heparin tubes. Then volume of TWC counted. The consumed dose in each group was:

Drug	First group	Second group
Atropine	0.05 mg/kg (IM)	0.05 mg/kg (IM)
Acepromazine	0.05 mg/kg (IM)	---------
Pentobarbital	15 mg/kg (IP)	15 mg/kg (IP)

Results- In two separate groups that bleed of Jugular vein, after counting WC, the results are shown in the table below:

	First group	Second group
Before anesthesia	5.9	6.6
After anesthesia	5.8	5.3

Conclusion and Clinical Relevance- Acepromazine is sedative and used for local insensitive and anesthesia when is needed in surgery.The results show that the amount of TWCC before and after anesthesia is almost constant in combination of Atropine-Acepromazine-pentobarbital but when Atropine-Pentobarbital was used, the TWCC is shown a significant decrease after anesthesia.
Key Words- Hedgehog, Atropine, TWCC, Pentobarbital, Acepromazine

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Poster Presentation

Surgical Repair of Cranioventral Hip Dislocation in a Cat: A Case Report

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Case Description- A seven years old female domestic short hair (DSH) cat was referred to the Veterinary Teaching Hospital of Shiraz University with history of left limb lameness for the consequences of car accident.
Clinical Findings- Orthopedic examination revealed pain and plain radiographs of the pelvis showed a unilateral, cranioventral dislocation of the left hip without any evidence of other bone diseases.
Treatment and Outcome- The limb was prepared for aseptic surgery. The craniolateral approach was selected in order to expose the hip joint. Reduction was performed followed by synthetic capsule repair to maintain reduction; two cortical screws were inserted in the dorsal rim of the acetabulum at the 10- and 1-o'clock positions. A third screw was placed in greater trochanter and two lengths of nylon (size 1) suture material were tied in figure of eight configuration under each screw head. Clinical follow-up and radiographic recheck were

performed at six months after surgery and confirmed excellent reduction of the hip joint. The patient was free of pain with a complete range of hip motion and had returned to previous activities.

Clinical Relevance- Ventral luxation is relatively rare (1.5%-3.2% in reported case studies). The clinical outcome of this report was very encouraging confirming coxofemoral joint congruity. No complications were found in this case regarding three screw fixation technique without any attempt to greater trochanteric osteotomy.

Key Words- DSH, Cranioventral Hip dislocation, Three screw fixation technique

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Poster Presentation

Surgical Resection of Subcutaneous Lipoma with Osseous Metaplasia in a Cockatiel *(Nymphicus hollandicus)*: A Case Report

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Case Description- A 5-year-old female cockatiel with unilateral dropped wing appearance, restricted movement and discomfort was presented.

Clinical Findings- Clinical examination revealed a yellowish, solid mass measuring 2×2×2 Cm on carpal region under the left wing. Surgical resection of the mass was suggested.

Treatment and Outcome- The bird was anesthetized with ketamin and diazepam injection and the site prepared for aseptic surgery. An elliptic incision was made into the skin and subcutis. The capsule of the mass was blunt dissected and extracted. The entire mass and surrounding necrotic soft tissue were removed en-bloc. The mass was submitted for histologic examination and the bird was recovered successfully. Histopathologic findings indicated lipoma with foci of osseous metaplasia.

Clinical Relevance- Lipomas are benign lumps of fat that usually grow just under the skin. Osseous metaplasia is one type of ectopic ossification of fibrous connective tissue and may occur secondary to ischemia, necrosis or inflammation in the tumor. To the authors' knowledgement, lipoma with osseous metaplasia has not been reported previously in veterinary medicine. Therefore the present case might be represent an unusual case of mesenchymal tumors with osseous metaplasia.

Key Words- Subcutaneous Lipoma, Osseous Metaplasia, Cockatiel *(Nymphicus hollandicus)*

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Poster Presentation

Bilateral Distal Femoral Salter Harris (Type 1) Fracture Repaired by Cross Pin in a Cat

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Case Description- A 4-monthold Persian cat was referred with bilateral Hind Limb Lamenessas a result of a fallto Shiraz School of Veterinary Medicine.

Clinical Findings- The lameness was associated with pain on manipulation of the Stifle, and bilateral Salter-Harris type 1 was diagnosed by Radiograph.

Treatment and Outcome- The fracture was reduced and fixed with 2 cross pins. The pins were inserted at an angle of 40–45º to the long axis of the femur. This surgery was performed in both hind limbs at same time. The cat was referred after 3 weeks for radiographic follow-up and removing pins. Radiograph showed physical union and patient was weight bearing 4 weeks after surgery. At 2-month follow-up, the cat was ambulating comfortably with a normal cosmetic appearance.

Clinical Relevance-This method has minimal effect on longitudinal growth of the bone and has been shown to be biomechanically superior to other documented techniques ex vivo. The distal femoral fracture was successfully

approached and stabilized. This method works well for young patients with physeal salter-harris1 fracture.
Key Words- Distal femur, Salter harris, Cross pin, Cat

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Poster Presentation

A Retrospective Study of Prevalence, Causes and Management of Canine and Feline Peritonitis

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Objective- The term peritonitis describes any inflammatory process involving the peritoneum and the peritoneal cavity. In abdominal cavity, peritonitis has improved nowadays. The present research is undertaken to study causes of peritonitis in routine condition in pet clinics.
Design- From March 2013 to March 2014 we collected120 peritonitis patients come to the pet clinics.
Animals- Animals were between 1 and 12 years old (mean 6.5 years).
Procedures- Diagnostic method was based on clinical signs (abdominal pain, abdominal distention, fever, nausea, vomiting, constipation, tachycardia, tachypnea, abdominal tenderness or rigidity), hematological, biochemical radiological and sonographical findings.
Results- The overall mortality rate was 17%. The most cases of peritonitis being caused by the septic operation especially in emergency one (55.14%), the other cases were perforation of an internal organs (8.33%), external wound introduce into abdominal cavity(0.83%), liver abscess (1.61%), inflammation of the pancreas (pancreatitis)(4.16%), rupture of the gallbladder or bile duct (0%), rupture of the bladder (0.83%), rupture of an infected uterus (pyometra) (25%) and viral infection in cats (feline infectious peritonitis) (4.1%).
Conclusion and Clinical Relevance- The results of this study showed that aseptic condition before and during operationand elective ovariohysterectomy could decrease prevalence of peritonitis significantly. Although patients received on time and proper antibiotics showed lower peritonitis after surgery.

Key words- Peritonitis, Operation, Antibiotics

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Poster Presentation

A Retrospective Study of Prevalence and Types and of Canine Genital Tumors

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Objective- Genital and mammary glands tumors are the most common tumorsin dogs and cats. Hormones play an important role in the hyperplasia and neoplasia of genital tissues, but the exact mechanism is unknown.It may involve only a small area or malignant tumors that metastases over the body.Tumors selected for this study weremammary gland tumors, Prostate tumor, Testicular tumor, vaginal and vulvartumors, ovarian tumors and transmissible venereal tumor.
Design- Retrospective Study
Animals- From March 2013 to March 2014 we collected 88 dogs (44 female and 44 male) with mammary or genital tumors that come to the pet clinics.
Procedures- Collection process included physical examination, complete blood cell count (CBC), serum biochemistry, histopathological exam, thoracic radiographs and in a few cases ultrasound were taken.
Results- Our findings showed that elder dogs are more likely to have tumors.Mammary tumors were the most common (85%) malignant tumor in female dogs. Mix tumors (Carcinosarcoma) are the most common tumors in mammary glands. Testicular tumors (56%) were the most common tumor in male dogs. Seminomas and interstitial cell tumors are the most common tumors in testis.
Conclusion and Clinical Relevance- Mammary tumors in dogs are most frequent in intact bitches. Ovariectomy before the first estrus reduces the risk of mammary neoplasia to 0.5% of the risk in intact bitches.Testicular tumors are not rare, castration prevents testicular tumors. Prostate cancer is slightly more common in castrated

dogs than in entire ones. Castration is not so effective in cancer prevention as spaying.

Key Words- Genital tumors, Mammary gland, Prostate tumor, Testicular tumor**,** Vaginal and vulvar tumors, Ovarian tumors, Transmissible venereal tumor

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Poster Presentation

Successful Report of Distal Femoral Transverse Fracture Repair with Rush Pin in a Mix Dog

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Case Description-A 3 year old, 25kg, male mixed dog with history of 3 days distal femoral swelling and lameness in left foot was referred to Shiraz University Veterinary Hospital.

Clinical Findings- Swelling and lameness was seen on distal area of left femur and in palpation pain was detected in mentioned area. For accurate Diagnosis craniocaudal and lateral radiographic views were taken. In radiography distal Methaphyseal transverse fracture was seen.

Treatment and Outcome- Lateral approach was used to open reduction of fracture. After incision 2 small sizes Steinman pins were used for fixation. Each pin covered approximately one fourth of medullary cavity and about half of the length of the femoral bone. Pins were cross each other proximal to the fracture line. Pins were inserted at an angle of 20–30º to the long axis of the femur. Inserting pins were stopped when they engage the proximal Metaphyseal bone of the femur. The tips of the pins were bent over and then cut off. Patient was referred for radiograph imaging and pin removal for 8 month later. Post-surgical radiographic examination shows successful clinical union of fracture.In this case, the dog has excellent recovery period and clinical union without pain and complication.

Clinical Relevance- Fractures of the distal segment represent about 20% to 25% of all femoral fractures. The distal segment is usually displaced caudally and accompanied by a sizable hematoma. Objectives of treatment should include (1) anatomical reduction and (2) rigid uninterrupted fixation so that the animal is free to move the stifle joint during the healing period. Suggested methods of treatment include Rush pins and small Trans fixation pins/K-wires inserted across the fracture line in a crossing or parallel pattern and it seems that rush pin is an excellent method for treatment of distal femoral fracture.

Key Words- Rush pin, Distal femoral fracture, Fixation

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Poster Presentation

Leg Calve Perthes Disease Treatment with Femoral Head and Neck Excision in Two Terrier Dogs

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Case Description- Two 11 month and 1 year old terrier dog with pain of hind limb were referred. Progressive hind limb lameness had been seen since about 4 months prior to referral.

Clinical Findings-The lameness was associated with pain on manipulation of the hip, particularly extension or abduction. Clinical examination and radiograph were done. The radiograph revealed reduced radio density within the femoral head and neck. Given the breed, age and radiographic finding, Leg Calve Perthes Disease was suspected.

Treatment and Outcome- The excision of femoral head and neck were performed via a craniolateral approach to the hip joint. The femoral neck osteotomised and rasped up to lesser trochanter. The bicipital flap was used to

decrease the risk of contact between the incised part of neck with acetabular rim.

Clinical Relevance- Femoral head and neck ostectomy (FHO) gives the most rapid and predictable return to function. Pain isrelieved by elimination of bony contact between the femur and the pelvis as scar tissue interposes. Because of slight limb shortening and some loss of range of motion, minimal gait abnormality should be anticipated.

Two cases were returned to active and pain-free use of the limb. These reports were shown good results are obtained by interposing soft tissue between the femoral neck and the acetabulum.

Key Words- Leg Calve Perthes, FHO, Dog, Terrier

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Poster Presentation

Clinical Report of Cleft Palate Repair in A Dog

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Case Description- A 3-month-old female Pekingese puppy was referred to the Veterinary Medical Teaching Hospital of Tehran University for Repair of a complete cleft of the secondary palate

Clinical Findings- On the clinical examination, coughing, sneezing, drainage of nasal discharge from the external nares and poor growth were found. The cleft was located on the midline. The size of the cleft was 5 mm in width and 20 mm in length in the hard palate.

Treatment and Outcome- The patient was placed dorsal recumbancy with the mouth held maximally open. The surgical repair was performed by the mucoperiosteal and overlapping flap technique.Briefly, the first incisions were made in the mucoperiosteum of the hard palate and the mucosa of the soft palate to create the mucosal flaps. Oral and nasal mucosal flaps were raised along the soft palate cleft. With the nasal mucosal flap reflected into the oral cavity, the oral mucosal flap was then sutured into the defect created by raising the nasal mucosal flap with a simple interrupted pattern. To close the hard palate, the mucoperiosteal flaps were undermined and moved toward the midline cleft. The tension-reducing incision was made just medial to the dental arcade, and closure of oral mucosa performed simple interrupted pattern.

Clinical Relevance- Cleft palates are congenital or acquired and effect the primary palate (lip) or the secondary (hard and soft) palate. Surgical repair of congenital cleft palate is indicated at an early age. Preservation of maximal tissue and tissue blood supply and a tension-free closure of the defect are requisite for successful repair.

Key Words- Cleft palate, Puppy, Mucosal flap

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Poster Presentation

Nylon Loop Fixation of Mandibular Symphysis Fracture in a Cat

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Case Description- A young mixed breed unconscious cat with a history of car trauma and obvious external bleeding in oral cavity was referred to the clinic.

Clinical Findings- The patient was mildly dehydrated (4%), with normal CBC and without pyrexia. The cat had inappetance and nasopharyngeal hemorrhage. Physical examinations declared no sign of lacerations in hard or soft palates. Further examinations showed asymmetric positioning of teeth and mandible. Simple skull x-ray demonstrated mandibular symphysis simple fracture.

Treatment and Outcome- General condition of the patient was stabilized and rehydration was performed. In this case, due to type of the fracture nylon loop fixation through submandibular approach was preferred. A 0.5 cm incision was made beneath the mandibular symphysis with special care given to hemostasis. Oral cavity kept open during the surgery using a mouth gag then a nylon suture (size: 2/0) was placed in the region through labial

surface of gingiva at both sides with guidance through the skin incision. In order to strengthen the fixation a loop was added to the suture around canine teeth at both sides. No sutures were needed to close the skin incision and it was healed after 2 days. Intravascular fluid therapy was continued for 2 days post-surgery. The patient was fed with bland diet during convalescence period. Fracture healing process was checked by simple x-ray study 20 days after surgery which showed thorough recovery of the bone and the loop was removed.

Clinical Relevance- Fractures are considered as the second most prominent urgent conditions preceded by diaphragmatic rupture following severe traumas. Therefore, maxillofacial fractures are among the dangerous conditions which can lead to gastrointestinal and respiratory system inflammations and infections if neglected and left untreated. Inappetance, lethargy and dehydration caused by maxillofacial fractures adds to the necessity of performing surgical fixations.

Key Words- Nylon loop fixation, Mandibular symphysis fracture

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Poster Presentation

Elongation and Dental Malocclusion in a Guinea Pig: A Case Report

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Case Description- Guinea pigs' teeth are "open rooted" and grow continuously. Sometimes the root grows or is pushed into the jaw, resulting in elongated roots. Dietary problems are the most important risk factor of this phenomenon.Every time a guinea pig becomes anorexic or a reduction of food intake occurs,root elongation appears rapidly. Some root elongation of the upper roots may obstruct the lacrimal duct.

An adult female guinea pig wasreferred to surgery ward of veterinary hospital of Tehran university with high grade root elongation and anorexia.

Clinical Findings- Clinical examination showed anorexia, weight loss and dehydration. Dentalradiographic findings revealed root elongation grade 3 and thinning of ventral mandibular border.

Treatment and Outcome- the animal was sedated with low dose of ketamine and xylazine, the cheek teeth wereadjusted by surgical intervention. The teeth were clipped and the crown height was reduced.Following the procedure another radiograph was taken in order to evaluate the trimmed teeth.

Clinical Relevance- An examination of the mouth may give no clue that this condition exists. Elongation of the lower roots can sometimes be felt as bumps along the jaw line.Elongation of the upper roots may put pressure on the eye causing tearing, bulging of the eye, infection, or other problems. Guinea pigs are unspecialized herbivores, and their primary foods in nature are grasses. In captivity, however, they often only receive concentrated or processed foods. This causes a decrease in tooth abrasion and use of teeth and jaws would be lowered like the discussed case. There is no definitive treatment for this case but the only way is trimming of the involved teeth and to modify the animals diet which should be consists of grasses.

Key Words- Root elongation, Guinea pig, Dental malocclusion

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Poster Presentation

Rubber Jaw Syndrome in a Young Rottweiler

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Case Description- A 4-month-old male, Rottweiler dog referred to our hospital with history of lethargy,

dehydration, vomiting, polyuria and polydipsia for a few days.

Clinical Findings- The physical examination revealed pale mucous membranes, flexible Jaws on firm palpation (rubber jaw syndrome) and loosens most of the teeth resulting from resorption of alveolar bone. Patient showed in last days shifting lameness as well. Radiographic examination of the skull revealed general reduced bone density. The dog could eat only soft food and was underweight. Laboratory evaluation revealed non-regenerative (hypoplastic) anaemia in result of synthetize and secrete erythropoietin in the kidneys, azotaemia and hypercholesterolemia, hyperphosphatemia. Proteinuria and Isosthenuria were found on the urinalysis.

Treatment and Outcome- Renal dysplasia with secondary hyperparathyroidism was diagnosed based on haematology and serum chemistry screen, radiological findings and histopathology. The dog was euthanatized with request of the owner and extremely poor prognosis.

Clinical Relevance- Hyperparathyroidism has been recognised for many years as a potentially serious complication of chronic renal failure. Chronic renal failure occurs most frequently in adult and aging dogs but is uncommon in juvenile or young dogs, in which it is often the consequence of a hereditary nephropathy. The main categories of familial nephropathies are renal dysplasia, primary glomerulopathiespolycystic kidney disease, amyloidosis, and glomerulonephritis. Renal dysplasia is defined as a disorganized renal development due to an abnormal differentiation of the parenchyma. The disease is characterised by the presence of structures that are inappropriate for the stage of development of the animal. Beside, renal osteodystrophy is a common long-term complication of end-stage renal disease that frequently described in dogs. Involvement of the jaws is common and radiographic alterations are often one of the earliest signs of chronic renal disease. However, in most cases, lesions are characterized by fibrous osteodystrophy of facial bones, affecting principally the mandible and the maxilla.

Key Words- Rubber Jaw Syndrome, Secondary hyperparathyroidism, Juvenile, Dog

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Poster Presentation

Clinical Report of Two Unrelated Tumor in a Dog and Its Surgical Intervention

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Case Description- Benign and malignant tumors of the mammary glands occur fairly frequently in unspayed female dogs; in fact they are the most common type of tumor in the group.

A 9 year old unsprayed dog was referred to surrey ward of veterinary hospital of Tehran university, with complaining of a painless growing mass in caudal mammary gland.

Clinical Findings- Clinical examination showed a painless mass on caudal mammary gland that due to the owner's say, this mass has been seen for the last 6 month but has grown in size in the last 2 weeks.

Treatment and Outcome- A chest ray was taken to rule out lung metastases, unfortunately, metastases lesions were seen. Under Ultarsonography guide, FNA was performed from the masses of the chest. Broncho alveolar carcinoma was diagnosed. Although poor prognosis was given to the owner but surgical intervention for the removal of mammary gland tumor was the owner's choice. After surgical preparation, simple mastectomy of caudal mammary gland was performed and the mass was sent for pathologic evaluation. Pathologic diagnosis was chondrosarcoma.

Clinical Relevance- Most mammary gland tumors occur in bitches over 6 years of age (the average age is 10). Forty-five percent are cancerous and 55 percent are benign. A mass may be large or small, with boundaries that are distinct or indefinite. Some lumps are freely moveable, while others adhere to the overlying skin or underlying muscle. Malignant tumors spread widely, primarily to the pelvic lymph nodes and lungs.

Key Words- Mammary gland tumor, Metastases, Chest tumors, Dog

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Poster Presentation

Intussusception Secondary to Parvovirus Enteritis in Three Dogs

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Case Description- Among the patients which referred to our hospital during one year with parvoviral gastroenteritis, intussusception was diagnosed in three dogs. First dog was two month-old, male, Great Dane, second dog was three month-old, male, crossed breed, third dog was seven month-old, female, crossed breed which referred.
Clinical Findings- In clinical examination depression, dehydration, weight loss, vomiting, dyschezia, tenesmus, rectal prolapse and haematochezia were revealed. The cause of enteritis was considered to be parvoviral gastroenteritis since canine parvoviral antigen (CPV-2) by kit (Quicking CPV Ag Rapid Test Kit, Model No. W81006, China) was detected. Abdominal radiography and abdominal ultrasonography were performed on the patients that were suspected of having intussusception. Thereafter they referred to surgery department for treatment.
Treatment and Outcome- First patient died under general anaesthesia due to severity of systemic disease. Second patient surgery was successful and he recovered completely. Third patient died one day after surgery due to systemic disease and complications.
Clinical Relevance- Intussusception is a type of intestinal obstruction that is created by the forceful invagination of one part of the intestine into the lumen of an adjacent segment and affects mainly young animals. The exact pathophysiology of the intussusception still remains unclear. It may begin as a result of a local intestinal incongruency in homogeneity (induration, acidity or sudden anatomic change in diameter) or a mechanical linkage of non-adjacent intestinal segments, which leads to a kink or a fold in the bowel wall. Intussusception has been reported to occur as a sequel to a number of conditions such as intestinal parasitism, linear foreign bodies, non-specific gastroenteritis, viral-induced enteritis (parvovirus, distemper), leptospirosis, intraluminal masses and prior abdominal surgery. Treatment of intussusception in dogs is by laparotomy and manual reduction or resection and anastomosis of the affected intestinal segment. Intussusception associated with systemic disease (e.g. acute viral enteritis or gastroenteritis) has an increased morbidity and mortality. In this case serial report, an attempt has been made to demonstrate that acute enteritis or gastroenteritis is the most likely predisposing factor for the intestinal intussusception in young dogs. It must be noticed that it is a severe pathologic life-threatening condition if diagnosis and surgical correction was postponed.
Key Words- Intussusception, Parvoviral gasterointeritis, Dog

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Poster Presentation

A Clinical Report of Severe Root Elongation in a Rabbit

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Case Description- A one-year-old male New Zealand white rabbit with a severe swelling in the ventral border of the left mandible was presented to a private clinic.
Clinical Findings- Soft diet was totally used for feeding of the patient. According to the history and the physical examinations, root elongation was considered and the patient was referred for radiography. Radiography showed elongated roots of mandibular cheek teeth which had penetrated mandibular bone and caused osteomyelitis and abscess formation. According to the radiographic findings, root elongation (grade 5) was our final diagnosis.
Treatment and Outcome- Due to the poor prognosis and limited treatment options at this stage, euthanasia recommended but owner did not accept. So the abscess was treated and the patient was discharged. Two month later, the rabbit was referred again with abscess formation at the previous site. Repeated radiography revealed progressed root elongation and osteomyelitis. Extraordinarily, in spite of severity of lesions the patient appetite had not been affected. Therefore, the abscess was evacuated and the patient was discharged again.

Clinical Relevance- Rabbits are lagomorphs and all their teeth grow continually throughout their lives. Continuous growth of teeth makes them susceptible to dental root elongation if they are fed by soft foods. In the face of other reports, except abscess formation our patient was not suffered from routine clinical signs of this disorder such as anorexia, drooling and epiphora and continued his life for more than 6 months. Consequently, euthanasia may not be a direct decision for every case of severe root elongation.

Key Words- Root elongation, Rabbit, Abscess

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Poster Presentation

En Bloc Ovariohysterectomy Following Dystocia Due to Superfetation in a Cat: A Clinical Report

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Case Description- A 1/5-year-old domestic short hair indoor-outdoor cat.
Clinical Findings- The cat was experiencing its second pregnancy and referred to small animal hospital of faculty of veterinary medicine with chief complaints of lethargy, hyporexia, tachycardia, vaginal hemorrhage and prolonged delivery. The cat mated outdoors, Thus, There was no clear history of other tom(s). In radiographic examination, one fetus was detected in abdominal cavity. Ultrasonographic examination was revealed high fetus heart rate, gestational age around 50±2 days, and probability of abortion of one fetus.
Treatment and Outcome- An en bloc ovariohysterectomy was performed. Immediately after OHE, neonatal resuscitation started. Four neonates were found in different sizes. The most mature neonate, survived. Age of other three neonates estimated 28 to 32 days of age, embrologically.
Clinical Relevance- Superfetation**,** carrying fetuses of different ages resulting from separate matings in different heat cycles, seems the main reason of dystocia in this cat that is due to inability of immature embryos to deliver. However, it is a rare cause for the situation.

Key Words- Superfetation, Pregnancy, Dystocia, En Bloc

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Poster Presentation

Surgical Treatment of a Fractured Plastron in a Spur-thighed Tortoise (*Testudo graeca*)

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Case Description- A 20-year-old Spur-thighed tortoise (*Testudo graeca*)
Clinical Findings- The patient was referred to small animal hospital of university of Tehran after biting by a dog and obvious full-thickness fracture in cranial part of the plastron. Radiographic examination revealed a complete transverse fracture in the plastron.
Treatment and Outcome- Debridement and bandage was planned in first few days of treatment to reduce contamination of affected site. The decision was made for surgery after several days with decrease in number of necrotized and contaminated tissues. The tortoise was anesthetized with isoflurane and Plastron surface was prepared with antiseptics. Fracture compartments were fixed by screw and orthopedic wires as tension band wire method. Antibiotic therapy continued for 4 week.
Clinical Relevance-This study revealed two-stage treatment of severely contaminated fracture of plastron including debridement followed by tension band wire is suitable approach for such a lesions.

Key Words- Tortoise, Pplastron, Tension Band Wire

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Poster Presentation

Surgical Correction of Pressure-induced Fibrosis due to the Foreign Body in the Neck of a Dog

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Case Description-The patient was a nondescript dog due to pressure caused by closing the rope around the neck, in addition to scarring and fibrosis, impaired lymphatic vessels and edema was created in the head.
Clinical Findings- After examination it was found that pressure on the neck region caused the formation of fibrosis and disruption of the blood and lymph circulation in the head region.
Treatment and Outcome-Patient was anesthetized and cervical lesions removed with surgical procedure.
After removal of the lesion and the course of the recovery period, the symptoms were resolved.
Clinical Relevance- After correcting the blood and lymphatic circulation, edema and abnormalities are reversible.
Key Words- Dog, Foreign body pressure, Fibrosis, Neck region

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Poster Presentation

Radial Meromelia and Ulnar Polydactyly Associated with Hypertrophic Osteodystrophy in a Giant Breed Dog under 1 Year Old.

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Case Description-A giant breed dog under one year old with non-weight bearing on left forelimb and the history of pyrexia, diarrhea and anorexia was referred to veterinary clinic of Ferdowsi University of Mashhad.
Clinical Findings- On physical examination showedthe left hand has an extra digit on ulnar side; the limbs were generally warm to the touch and painful upon deep digital palpation.Footpad hyperkeratosis was seen symmetrical bilaterally and non-edematous soft tissue swellings on distal portions of all four limbs. Abnormal breath sounds was heard in lung auscultation. In radiographic evaluation radial meromelia of the left forelimb, ulnar polydactyly and hypertrophic osteodystrophy was diagnosed.
Treatment and Outcome- The owner of the dog didn't approve payments for any treatments and we couldn't perform further examinations.
Clinical Relevance- Meromelia is a birth defect characterized by the lacking of a part, but not all, of one or more limbs with the presence of a hand or foot.It results in a shrunken and deformed extremity and may either present as an isolated defect or associated with other malformations; and the diagnosis is mainly clinical. Ulnar polydactyly, refers to the presence of an extra digit on the ulnar side of the hand.
This is the first reported case of radial meromelia and ulnar polydactyly associated with hypertrophic osteodystrophy in a dog. Hypertrophic osteodystrophy is a common pathological condition associated with a broad spectrum of diseases. The aim of this case report is to highlight the condition and remind clinicians of its relatively common incidence, as well as to prompt clinicians to look for underlying pathology.
Key Words- Meromelia, Polydoctyly, Hypertrophic Osteodystrophy, Dogs

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Poster Presentation

Surgical Repair of an Esophageal Laceration in a Breeder Ostrich *(Struthio Camelus)*

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Case Description- A male breeder ostrich
Clinical Findings- A male breeder ostrich with a deep laceration on the skin involving esophagus presented for surgical treatment.
Treatment and Outcome- Anesthesia carried out on the bird using Ketamin and Diazepam regimen, lacerated area of the esophagus repaired using simple interrupted suture and skin and subcutaneous tissues sutured too. After surgery the bird fed with soft grained feed and antibiotic therapy done for 10 days.
In the case of traumas such this case, surgery is an emergency procedure that should be done immediately.
Clinical Relevance- Esophageal laceration can occur traumatically in ostriches, their aggressive behaviour throught sexual activation season and their contacts with fences is a major cause of this problem. Cutaneous ruptures are the most common form of accidental ruptures in ostriches but esophageal involvement is less common. In this brief communication we describe surgical treatment of a case of esophageal rupture in a male breeder ostrich *(Struthio Camelus).*
Key Words- Esophageal laceration, Treatment, Ostrich

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Poster Presentation

Comparison of Conventional and Modified Ovariohysterectomy Technic in Cat

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Objective- To describe a new modified ovariohysterectomy technic to compare surgery time, complications, postoperative pain and material used with conventional OHE in cats.
Design- Randomized, prospective clinical trials
Animals- 74 healthy sexually intact female cats weighing < 5 kg
Procedures- Cats were allocated randomly to receive both conventional (34 cats) and modified (30 cats) OHE. Intraoperative complications, total anesthesia and surgery time were recorded. Pain scores were assigned by non-blinded observers at 2, 6, 12, 24 and 48 hours postoperatively. Duration of surgery, clinical outcomes and material used were also compared between these two approaches.All surgeries were done by one designated surgeon.
Results- The mean surgical time for C-OHE (26 minutes) was somehow longer than for M-OHE (12 minutes). Significantly lower pain scores were identified with M-OHE at all times. Relatively, cats in M-OHE group required no additional pain medication on the basis of pain scores. Surgical complication at M-OHE was difficulty to reach uterus. The mean incision length in M-OHE was about one third of C-OHE.
Conclusion and Clinical Relevance- M-OHE was performed successfully in cats < 5 kg. Surgical time, complication rates and material used were lower; however, chance of finding uterus was less.
Key Words- OHE, Surgery, Cat, Pain score

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Poster Presentation

Meningioma in Dog: A Case Report

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Case Description- An 11 year-old mongrel bitch having neurologic signs (such as propulsive gait and seizure) referred to a veterinary clinic.
Clinical Findings- Signs exacerbated over the month led to surgery. At first it begun with circling then continued with propulsive gait, vision loss, generalized seizure disorders and cranial nerve deficits.
Treatment and Outcome- Surgery was performed on this dog using a transfrontal craniotomy. A free fascial-fat graft was used to cover the dural defect resulting from surgery. No further complications followed in the immediate period after operation.
Clinical Relevance-The histopathologic diagnosis in this case was meningioma. Generalized seizures recurred, therefore the dog was euthanized on demand of patient's owner 12 weeks postoperatively.
Key Words- Nervous system, Meningioma, Seizure, Dog

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Poster Presentation

Anal Sac Adenocarcinoma in an Eleven Year Old Female Terrier: A Case Report

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Case Description- Anal sac adenocarcinoma which is originated from apocrine gland epitheliums is a malignant tumor. They occur more often in intact males than females and are more prevalent in ovariohysterectomized females in comparison to intact females.The tumor is seen in different breeds of dogs aging between 5 and 12 years. The tumor metastasizes (90%) to regional lymph nodes such as iliac, sacral, and sublumbar, however, tumor cells may reach distant organscommonly lungs, liver, and spleen. Paraneoplastic syndrome is associated with some anal sac adenocarcinomas that result in persistent hypercalcemia and secondary renal failure.
An 11 year old intact female white Terrier dog weighing 10 kg with no history of illness was presented to the clinic for routine checkup. In anal sac evacuation a right perianal unilateral mass was recognized as an incidental finding.
Clinical and laboratory Findings- Subsequent problems such as polyuria, polydipsia, dyschezia, tenesmus, poor appetite, and vomiting were not noted. No signs of metastasis were noted in thoracic and abdominal radiography. Biochemical profile showed elevated total calcium, but no other abnormalities were found in complete blood cell count.
Treatment and Outcome-Anesthesia was done using atropine and promethazine as premedication and followed by midazolam and ketamine as an induction. Isoflurane in 100% oxygen was used for maintenance of anesthesia. The mass was removed surgically by a curvilinear incision and the empty space was closed with 2-0 Vicryl suture material in purse string fashion. Skin was closed with 3-0 Nylon suture material. Histopathological evaluation showed solid sheet and tumor cells, subdivided by thin bands of fibrous tissue. The cells had round to oval normochromic to hyperchromic nuclei, with a prominent nucleous and a small amount of eosinophilic cytoplasm. Some mitotic figures, hyperemia and hemorrhage were seen. According to these observations, this tumor is malignant, named anal gland carcinoma or adenocarcinoma.
Clinical Relevance- In a study of 32 dogs with ASAC, the diagnosis was made as an incidental finding in 11 dogsas in our study. In another study; polyuria, polydipsia, weakness or lethargy related to hypercalcemia, and local irritation, tenesmus or constipation associated with iliac lymph nodemetastasis and enlargement were observed. But in our case there was no history of clinical signs.In 2 reports, 11 out of 14 and 30 out of 32 dogs with ASAC were female.In one study median age at diagnosis was 9.9 years (range, 7.9 –

11.9 years).Unusually in our study, the dog was not ovariohysterectomized.
Key Words- Anal sac, Adenocarcinoma, Terrier dog

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Poster Presentation

Leiomyosarcoma in Small Intestine of a Bitch; A Case Report

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Case Description- A 7-year-old female German shepherd weighting 28 kg presented with vomiting, diarrhea, lethargy, weakness and anorexia for a few weeks.
Clinical Findings- Physical examination revealed mild abdominal pain due to presence of a palpable mass in abdomen. However, no evidence of metastasis was seen in thoracic radiographs, ultrasonography shown metastatic patterns and structures. Hematology indicated hypoglycemia and pathology proved the leiomyosarcoma.
Treatment and Outcome- Surgery and intestinal anastomosis were suggested and the mass was removed cautiously. 2 months postoperativelysigns of metastasis (cannonballs) were found in thoracic radiographs, so as the last choice euthanasia was preferred.
Clinical Relevance- Leiomyosarcoma is a malignant slow-growing, locally invasive tumor of smooth muscle origin that typically is slow to metastasize. Leiomyosarcoma reportedly is the 2nd most common canine intestinal tumor and the most common intestinal sarcoma in dogs. Leiomyosarcomas commonly involve the cecum and jejunum of old dogs, with a median age of onset of 10.5 years. Leiomyosarcomas comprise approximately 20–30% of all intestinal neoplasms in the dog, and therefore are the most common sarcoma of the canine intestinal tract. Despite this frequency, intestinal leiomyosarcomas were diagnosed in less than 0.2% of 10,270 postmortem examinations on dogs. Few studies exist that describe survival data in dogs with gastrointestinal leiomyosarcoma, and even fewer reports exist that describe metastasis in these dogs.
Key Words- Leiomyosarcoma, Metastasis, GI Tract, Dog

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Poster Presentation

Comparison of Bipolar and Ultracision Electrocoagulation in Laparoscopic Ovariectomy in Queens

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Objective- newly sophisticated cauterization instruments such as harmonic scalpel and ligasure in comparison with conventional methods like monopolar and bipolar electrocauter, have gained wide range of acceptance amongst surgeons and patients. There are reports of laparoscopic removal of ovaries by using monopolar, bipolar and harmonic electrocauters but no report exists in cats.
Desgin- Experimental study
Animals- Twele female cats were divided into two equal groups for laparoscopic ovariectomy by bipolar electrocauter (group one) and harmonic electrocauter (group two), in supine position at 30 degree from the horizontal line. A 5 mm portal used for camera insertion at umbilicus in all cats and the other 5 mm portal was placed midway between umbilicus and pubis bone in both groups.
Procedures- Following identification of ovaries, suspensory ligament, ovarian vessels, and broad ligament were coagulated by using either bipolar electrocoagulator in group 1 or harmonic electrocoagulator in group 2. The pedicles were checked for any signs of hemorrhage. Ovaries were removed from abdomen through portals.
Results- Surgical time, released smoke, hemorrhage and degree of burning of tissues were estimated during surgery using statistically visual analog scale, and surgeries recorded with DVD recorder. All four parameters were significantly different in group 1 and 2 ($p<0.05$).
Conclusion and Clinical Relevance- harmonic electrocauter is safe and has the advantages of reducing

Surgical time, released smoke, hemorrhage and degree of burning of tissues compare to that of bipolar cauterization.

Key words- Laparoscopy, Ultracision, Queen, Bipolar, Ovary

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Poster Presentation

Canine Patellar Luxation in 22 Dogs of Different Breeds: A Case Series

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Objective- One of the most common orthopedic conditions encountered in dogs is patellar luxation. Most luxations are primarily a developmental condition, because they occur early in life and are not associated with trauma. These luxations are divided into the medial and lateral dislocation. Medial luxation is much more common than lateral luxation in all breeds (75-80%), and bilateral involvement seen in 20% to 25% of cases. The purpose of our study was to determine the frequency of age, sex, breed, concomitant disease, and surgical procedure in dogs with patellar luxation.
Design- A case series study
Animals- Twenty two dogs were presented to the Veterinary Teaching Hospital of Ferdowsi University of Mashhad during the last three years.
Procedures-Details regarding breed, sex, age, kind of luxation, concomitant disease, and surgical procedure were obtained from the medical records.
Results- Twenty two dogs (8 males and 14 females) were included. Age and weight average were 2.33 and 10.57 respectively. One case had unilateral lateral dislocation, seventeen cases had unilateral medial, and finally four cases had bilateral medial luxation. Based on the different grade of patellar luxation, three distincttechniques were chosen.
Conclusion and Clinical Relevance- In the present study of patellar luxation in different breeds of dogs, terriers were over-represented (31.8%). In the study of Gibbons and co-workers in 2006 there were 97% medial luxations, as well asin our review the most luxation were medial (18.18% bilateral and 77.27% unilateral). In our study 27.27% of cases had a history of trauma, but in the other studies most of them were developmental. Patellar luxation occurs most often early in life.
Key Words- Dog, Patellar luxation, Surgery

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Poster Presentation

Cutaneous Squamous Cell Carcinoma in a Four-Year Old Mix Breed Dog: A Case Report

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Case Description- A 4 year old intact male mix breed dog weighing 33 kg with a history of lethargy and presence of the solid mass on the right lateral side of the mandible was presented to the Veterinary Teaching Hospital of Ferdowsi University of Mashhad.
Squamous cell carcinoma is a malignant tumor of epidermal cells in which the cells show differentiation to keratinocytes. The tumor commonly reported in horse, cow, cat, and dog, relatively uncommon in the sheep, and rare in goat and pig.

Clinical Findings- Poor appetite, lethargy, weight loss, and weakness were subsequent problems. No signs of metastasis were noted in thoracic and abdominal radiography. Complete blood cell count showed reduced PCV and MCV, and mild leukocytosis. But no other abnormalities were found in biochemical profile.

Treatment and Outcome- En-bloc resection was chosen as a method of treatment. Anesthesia was done using atropine and acepromazine as premedication and followed by diazepam and ketamine as an induction. Isoflurane (2.5%) in 100% oxygen was used for maintenance of anesthesia. The mass was removed surgically by elliptical incision 1-cm around it. Subcutaneous tissue was closed with 2-0 Vicryl suture material in simple continuous pattern and the skin was closed with 1 Nylon suture material in a cruciatefashion. After 1 and 6 month follow up respectively there was no sign of recurrence. Histopathological evaluation showed squamous epithelial cell carcinoma, severe superficial necrosis, and inflammation.

Clinical Relevance- The peak incidence of squamous cell carcinoma in the dog is between 6 and 10 years of age. In our study the dog was 4 years old. The dog were used as an sheepdog, perhaps prolonged exposure to ultraviolet light can be one reason of the occurrence. Squamous cell carcinoma is mainly slow growing tumor. The case presented has not shown regional lymph node and lung metastasis. In the study of 325 dogs with skin tumor only 1.25 % was diagnosed as squamous cell carcinoma.

Key Words- Squamous cell carcinoma, Mix breed dog, En-bloc resection

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Poster Presentation

Common Mistakes Made by Veterinary Surgery Specialists

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Mistakes made by a veterinary surgeon during surgeries have long been overlooked due to various reasons such as the surgeons' denial of their mistake, considerations taken into account by the aid and the operating staff, lack of a thorough data collecting system and poor follow up system which leads to missing out on the consequences of a faulty surgery. Shortcomings may be the result of operating the wrong patient or the wrong body part, or application of the wrong approach. These mistakes have been revealed by the surgeon's confession during or following the operation, the owner's complaint and dissatisfaction with the final result, deterioration of the patient's conditions, observing evidences of the surgery e.g. video recordings, and investigation of the surgeon's report of the operation by authorities familiar with the subject.

Common mistakes in small animal surgery include; incomplete removal of mammary gland tumors and lack of drainage afterwards, incomplete depletion of the uterus while caesarian section or the fetus remaining in the birth canal, failure to remove the vaginal tunic in open prescrotal castration which results in sever swelling of the scrotom, excessive tissue removal in surgical correction of entropion resulting in ectropion, excessive tissue excision during lengthening the prepuce and the consequent conversion of paraphemosis to phemosis, rupture of the pleura attached to the ribs while removing ribs, inappropriate utilization of rush pins in femur fractures and subsequent condylar fractures. There are also numerous mistakes concerning large animal surgery which consist of; incision of duodenum while performing the right flank laparotomy incision, incision of abomasum during correction of its right displacement, incorrect incision of the uterus in caesarian section, incomplete ligation of testicular vasculature in castration of horse, rectovaginal fistulae formation due to inaccurate suturing, ureteral obstruction consequent to neglecting to mark the prepuce in surgical correction of penile deviation.

Since mistakes are an inseparable part of any profession including surgery, in the current paper the most common of these mistakes, the predisposing risk factors and recommendations as to avoid or minimize their occurrence have been thoroughly discussed.

Key Words- Mistakes, Veterinary surgery, Veterinary surgeons, Failure

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Poster Presentation

Clinical Evaluation of Electrocautery, Ligation, Eucrasor and Blind Manual Method in Rooster Orchiectomy

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Objective- to Evaluation of Electrocautery, Ligation, Eucrasor and Blind Manual Method in Rooster Orchiectomy
Design- Experimental
Animals- 40 healthy mature rooster from native breed were selected randomly and divided to 4 equal groups
Procedures- After general anesthesia with ketamine and xylazine, surgical preparation and dorsoventral position, transverse abdominal incision between xyphoid and cloaca was selected as surgical approach. In each group, testes were grasped and divided individually with 4 methods: ligation, eucrasor, electrocautery and blind manual method. Abdominal wall and skin closure were performed with 2/0 catgut and nylon 3/0 respectively. Oxytetracycline was injected 3 days as postoperative antibiotic therapy. Breeding conditions was same in all groups for 3 months.
Results- Mortality rate in blind manual method was only 10%. In eucrasor method failure rate was 30% mainly because of inappropriate positioning of eucrasor and resultant bleeding. Ligation and electrocautery were extremely high risk, impossible and impractical methods because of thermal damage in adjacent organs and minimal room for ligation.
Conclusion and Clinical Relevance- According to this study, blind manual method is a method of choice because of easy and fast handling, minimal bleeding and failure rate. Eucrasor is a relatively acceptable method because of easy application, good hemostasis and minimal risk of adjacent tissue damage. Ligators need ample room for application. Electrocautery has high risk of thermal adjacent tissue damage and excessive time consumption .Transverse abdominal approach has many benefits including good access to both testes and minimal bleeding.
Key Words- Electrocautery, Ligation, Eucrasor, Rooster, Orchiectomy

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Poster Presentation

The First Report of Aberrant Corneal Occlusion in Rabbit in Iran

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Case Description- Formation of a conjunctival membrane over the corneal surface is a condition unique to rabbits that has been labeled aberrant corneal occlusion or pseudopterygium. In the summer of 2013, a five years old male Standard Chinchilla rabbit were presented to Karaj Central Veterinary hospital and the owner complained that his rabbit shows degrees of blindness and there were opacities on both eyes of the presented rabbit.
Clinical Findings- Ophthalmic examination of the affected eyes revealed a conjunctival fold stretching over the cornea of both eyes. The fold originated from limbus and it was vascularized and centrally thickened. There were no attachments to the corneal epithelium and the fold could be easily lifted.
Treatment and Outcome- Surgery was performed under general anesthesia. The conjunctival fold was incised centrifugally up to its attachment at the limbus and the lid margin using small scissors. The central rim of the segment was then replaced to its normal position in the fornix and fixed with mattress sutures (7/0) passing through outside skin. After the surgery, eye drops containing dexamethasone, gentamicin and polymixin were applied twice daily up to 3 weeks. Within the observation period (8 months) no recurrence was noted.
Clinical Relevance- "Pseudo" in the term pseudopterygium refers to the fact that the conjunctival membrane is not adhering to the underlying cornea, but growing over it. In rare cases, the membrane may be loosely attached to the cornea, but can be easily separated without causing damage. It can cover only a small part of the cornea with an annular peripheral opacification of the cornea, or cover it almost fully, leading to blindness. Ethiopathogenesis remains unclear

and recurrence of the problem is very likely. The surgical technique that used here decreases probability of recurrence of conjunctival fold.

Key Words- Rabbit, Cornea, Aberrant corneal occlusion, Pseudopterygium

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Poster Presentation

Evaluation of Partial Nephrectomy Using Figure Eight Suture in Dogs: Introducing New Technique

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Objective- To evaluate the utility of dog model for collecting system closure after partial nephrectomy using figure eight suture technique with renal capsule intact, in an attempt to minimize technical problems in partial nephrectomy, several new techniques and technologies have recently been explored. How renal function may best be preserved without complete renal circulatory arrest is the main objective of this study.

Design- Experimental study

Animals- In this study six healthy dogs with ethical permission accepted, partial nephrectomy performed using continuous suturing pattern (figure eight) without renal artery closure.

Procedure- All dogs in dorsal recumbency and left kidney exposure with the suture material vicryl no 1, underwent for partial nephrectomy. Values of hemoglobin at pre-operative and first and third post operative days were estimated. All dogs survived after surgery for long time without any renal dysfunction.

Results- All dogs tolerated surgical procedures successfully. Mean operative time was 25 minutes. Estimated mean intraoperative blood loss was negligible (< 10 ml). Additional vascular repair was done in one dog. There were no significant postoperative complications. Postoperative follow up showed that the renal parenchyma was not damaged. This technique represents a feasible option for patients with renal masses.

Conclusion and Clinical Relevance- Our initial experience of introducing new technique for performing partial nephrectomy showed the feasibility and safety of the technique. We believe that this technique even has the potential to make laparoscopic partial nephrectomy for renal cells safe and reliable.

Key Words- Kidney, Nephrectomy, Dog

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