

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 limb and 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 harvested to fill the defect area. The graft were sutured to the two edges of tendon using locking loop pattern. Subcutaneous layers and 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 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-operative ocular 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 results unlikely 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 Relevance-** 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