ANGIOGRAPHIC EVALUATION OF NORMAL BLOOD CIRCULATION OF THE DIGIT AND HOOF IN THE GOAT

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Abstract:
The present study was carried out to determine normal circulatory pattern to the foot and digits of goat in order to be used as a base for comparison with diseased digits or hooves in the future lameness study in small ruminant. Front legs and hind legs of 10 healthy goats of both sexes, were collected fresh immediately after slaughter. The plantar artery was dissected and catheterized by 18 gage catheter. Then 10 ml contrast medium (Lipidol) was injected trough the catheter. Radiographs were obtained in lateral and anterior-posterior position. They were evaluated and studied over the negatoscope and fine details of blood vessel were recorded.

The medial digital artery of the fore leg descends on the medial side of the medial digit and terminates at the bulb of claw by anastomosing with the corresponding proper digital artery. The lateral digital artery arises from the deep arch, passes down on the lateral side of the lateral digit and is distributed similar to the medial side. The lateral digital artery and the medial digital artery meet each other or anastomose together at the toe and sole forming a uniform network of capillaries. The main blood supply of the digit region in the hind leg is essentially the distal extension of those vessels on the dorsal and plantar aspects of the metatarsus similar to the fore leg. The lateral digital artery and the medial digital artery meet each other or anastomosise together at the toe and sole forming a uniform network of capillaries.

No report could be find in the literature regarding angiographic evaluation of the fore foot and hind foot in small ruminant. Therefore this study is describing normal circulatory pattern of goats' digits.
THE PRACTICAL USE OF STEM CELLS IN HEALING OF TENDON LIGAMENT INJURIES AND STRESS FRACTURES IN HORSE

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Abstract:

Stem cells have great potential power for differentiation to very kinds of stem cells. Theoretically, when these cells use as part of the healing system, unlimitedly until man or animal is alive, they cleave to the other cells and these new cells can stay stem cell or can change to more evolved cells with more special function like muscular, cerebral or hemoral cells. In first researches, it was expected that embryo is only source of these cells but nowadays it is decided that these cells exist in some tissues especially fat tissue. If a bone fractures or a ligament ruptures, stem cells receive some messages and go to the injury location that change to every tissue that need. Recent researches had centralized on man diseases therapy but now this new therapy comes for horse. Ligament and tendon injuries have serious effects on horse performance and slow healing of these injuries include principal problem for horse owners. Therapy techniques of stress fracture is also long and unusefull. These injuries treatment had done by bone marrow for some years but use of stem cells is only possible from 2002 that scientists can segregate these cells from small sample of fat tissue and concentrate them and inject to view position. These ligaments and tendons cure rapidly, without scar tissue and more elastic. Differentiation to position cells increase chance for the horse to return to full performance, therefore one of the oldest problems of racing horses is curable with this new technique.
Abstract:
C-Section is one of the oldest and most common surgical procedures for cows done by veterinarians, throughout the world. In every cesarean, three goals should be considered clinically, survival of dam, survival of cows and maintained of fertility.

Wound infection and uterus adhesion can venture all these three vital outcomes. The most important factor influenced for development of these adverse effects, is the selection of proper laparotomy landmark for C-Section. There are many laparotomy landmarks suggested by specialist either in right or left side of the abdominal wall with some advantages or disadvantages. But due to huge abdominal cavity special in high milk producing cows, determining of gravid uterus horn is necessary to be pictured. Although, the location of gravid uterus with fetus can be indicated by ballottement either in right or left side of abdomen but the more important, where the laparotomy incision must be performed reaching safe to gravid uterus horn.

Nowrouzian and coworkers have shown the reliability of the Ballottement method as a predictive indicator for successful C-Section procedure in cows. In the present prospective field study at 10 dairy farms in the vicinity of Tehran, 49 pregnant dairy cows with huge abdominal cavity were selected and the presumption protocol regarding picturing of the gravid uterus horn were applied and the decision for laparotomy incision was made on 8 established landmarks. The epidemiological indices were calculated and positive predictive values were found 76-100%, for Ballottement methods based on proposed protocol for C-Section in these cows. From the results of this study, it is concluded that picturing of the location of gravid uterus horn in abdominal cavity will enable surgeon for proper decision to do C-Section easy with less complication as it could be anticipated.
CAVERNOUS SPLENIC HEMANGIOMA IN DOG (A CASE REPORT)


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Abstract:

An 8.5-year-old male Dachshund was presented, with a history of lethargy, inappetence, polyuria, and distention of the abdomen. Palpation of the abdomen revealed a large painful mass located in the topographic region of the spleen. Abdominal radiography showed a mass with soft tissue density in the spleen. Ultrasonographic echogenicity of the mass resembled that of the spleen, but there were multiple hypo-echoic regions present as well. Laparotomy revealed a mass that extended from the greater curvature of stomach to the inner outlet of pelvis. Extensive adhesions on the parietal surface of the spleen and distorted tissues in the hilus of spleen and omental bursa were observed. Macroscopically, the mass was 26 centimeters in diameter. A 9 centimeters long portion appeared normal and a 17 centimeters long portion had undergone pathologic changes, with a honey comb pattern, and soft consistency. Microscopically, the tumor was well circumscribed by a thick connective tissue and was composed of vascular spaces of various sizes, filled with erythrocytes and lined by a single layer of plump uniform endothelial cells. There were abundant organized thrombosis and extensive hemorrhages and necrosis were present. Based on the macroscopic and microscopic findings the mass was diagnosed as cavernous splenic hemangioma.
RESECTION OF PROLAPSED IRIS (IRIDECTOMY) IN A MIXED DOBERMAN-GERMAN SHEPHERD PUPPY

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3: Student of vet medicine. Faculty of vet Medicine, Tehran University, Tehran, Iran.

Abstract:

Corneal ulcer is a defect in the corneal epithelium and some amount of stroma, maybe caused by trauma or chronic irritation. Deep ulcers can lead to rupture of cornea, the escape of aqueous humour and often prolapse of iris. For treatment of corneal ulcers and resection or replacement of prolapsed iris, tarsorrhaphy and third-eyelid flaps are applied only in superficial noninfectious ulcers. Deep complicated corneal ulcers require conjunctival or third-eyelid flap, conjunctival pedicle graft, suture lacerations and reconstitution of anterior chamber.

In 8/10/04 one male three months old mixed doberman-germanshepherd puppy with 5.5 kg weight refered to small animal hospital of Tehran university because of corneal ulcers. The dog had a corneal wound with prolapsed iris from 12 days ago. The prolapsed mass got smaller during 5-7 days ago. At first the dog was sedated with acepromazine maleat (0.05 mg/kg) and ketamin hydrochloride (20 mg/kg). The mass was incised and removed. Then with strabismus scissor one pedicle flap was removed from dorsolateral bulbar conjunctiva and sutured over the wound with three simple interrupted sutures with nylon No 8/0 with spatulated needle. During operation aqueous humour was escaped accidentally; so anterior chamber filled with injection of ringer serum, but the anterior chamber had some blood. Local antibiotic therapy with ciprofloxacin ocular drop and general antibiotic therapy with cephalexin syrup were performed. After 7 days the sutures were removed. Anterior chamber was not dark and blood was absorbed without corneal vascularization and scar formation.
RADIOLOGIC STUDY OF EGGSHELL EFFECT ON THE CANINE HUMERUS FRACTURES HEALING

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Abstract:
Fracture is one of the most commonly encountered problems that referred to veterinary clinics. Different methods have been presented for fracture treatment in this study, eggshell applied as a Bone-like substance. 10 mixed breed dogs in different sexes were divided into two groups. In test group, 5 dogs were prepared surgically and anesthetized and a bone defect was created on the right humeral shaft and filled with sterile eggshell powder and bone wax. In control group, 5 dogs operated similarly accepted that bone defect remained unfilled. All five dogs where under clinical examination for 70 days and frequently supplied all of dogs in lateral–view radiograph.

In test group, in 4 dogs after 28 days Callus Bridge was formed and in 56 days after operation defect was filled, but in one dog probably due to excessive Injury to bone marrow and endosteum healing process was slow. In control group in 48 days after operation Callus Bridge was formed and 70 days defect was remain unfilled. In conclusion, relative success in four of the dogs in test group strengthens the hope of this substance. This experiment should be repeated with more animals, other species and longer period of time.
CLINICAL STUDY ON PREVENTION OF REFORMATION OF UTERINE ADHESIONS USING HYALURONIC ACID SOLUTION IN COWS

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Abstract:
University A troublesome sequel to the caesarean section, especially in high producing dairy cows, would be adhesions of the uterus to the adjacent organs which is frequently associated with sterility and would impose economic losses to dairy farms. Various methods have been trialed for prevention of postoperative adhesion formation with controversial results. Hence, economic concerns in dairy practice sometimes call for re-opening the surgical site to repair the infertility associated with postoperative adhesion complications. However, In recent years, laparotomy is performed in human medicine in order to lyse previously formed adhesions and physical or chemical barriers are used to prevent the adhesion reformation. The present field study deals with the application of hyaluronic acid (HA) solution for prevention of reformation of the uterine adhesions in dairy cows. In 2003-4, amongst 36 Holstein cows with the history of c-section, six cows with subsequent infertility due to the uterine adhesions underwent the study after revealing the extent of adhesions through rectal examination. Second-look laparotomy was performed on the left flank, using caudal paralumbar fossa approach. The proper portion of adhesion tissue was reached for adhesiolysis with traction by hand or blunt cut using a small emasculator. Tissue stumps, in both ends, were then covered with 2cc of HA solution (hylarthyl®) and the incision site was closed in routine manner. Postoperative follow-up rectal examination revealed no significant adhesion reformation in four of six cases and in which later on, pregnancy was confirmed. However, in two cows mild adhesion reformation occurred with poor prognosis. The results showed that HA solution could be effective in preventing the adhesion reformation in cows under study.
STUDY OF ABOMASAL DISORDERS IN A DAIRY FARM

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Abstract:
Abomasal disorders are one of the most important problems in dairy farms that lead to surgery. Left displacement of abomasums (LDA), Right distention (RDA), Torsion (RTA) and Volvulus (RVA) of abomasum are among these disorders. Usually such disorders occurred among high productive dairies with high concentrate diet which produce more volatile fatty acid in their rumen.

Abomasal disorders in a high producing dairy farm (1400 milking cow) in 2003-2004 were analyzed. 56 cows out of 1327 parturitions (4.22%) were affected by abomasal disorders which 52 cases (92.85%) were LDA and 4 cases (7.14%) were RDA. Abomasal disorders in second and third parity were 23 out of 165 (13.93%) that was higher than heifers (4.01%) and cows older than fourth parity (10.34%).

Also crude seasonal prevalence of abomasal disorders were 7(12.5%), 11(19.64%), 20(35.71%) and 18(32.14%) in spring, summer, autumn and winter respectively. Autumn and winter prevalence were significantly higher than spring (P<0.05), but no significant difference in other seasons were recorded.

With regards to ever threat of production diseases in dairy farms (Including abomasal disorders) and regards to its economical importance it seems that on time diagnosis and treatment of the disease can avoid major economical losses.
COMPARISON OF PROPOFOL TIVA AND HALOTHAN ANAESTHESIA IN DOG

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Abstract:
Total Intravenous Anesthesia (TIVA) is one of the anesthetic methods is applying anesthetic agents such as propofol, ketamin and thiopental. Prppofol is an oil in water emulsion and an alkyle phenol combination as 2-6 diisopropilphenol that chemically, distinct from the other intravenous anesthetic drugs. Transient apnea in induction and vomiting in recovery are possible anesthetic problems with propofol. Dose dependent respiratory depression, increase heart sensitivity to cathecholamines has been reported in propofol anesthesia that makes this drug to be applied carefully in the patients who suffer from ventricular arrhythmia. Propofol decreases intracranial and intraocular pressure that makes it suitable for patients who suffer from meningitis, seizure and sever ulcer of cornea.

In present study five mix bred dogs weighted (20.8±2.92) were anesthetized in a cross-over design. All dogs treated against parasitic diseases with praziquantel (5 mg/kg). All dogs fasted for 24 hours before anesthesia but they have freely access to water. All dogs sedated with xylazine hydrochloride (2mg/kg/IM). 5 to 10 minutes later anesthesia was induced with propofol (3mg/kg). Anesthesia maintained with continuous infusion of propofol (0.2mg/kg/min) (Group I). Heart rate, respiratory rate, indirect blood pressure, temperature and hemoglobin saturation rate was measured in 15, 30, 45, 60 minutes after anesthesia. Propofol administration rate was set on the basis of ocular and haemostatic pinch reflexes and laying in lateral recumbency.

In second group (Group II) anesthesia were done two weeks after the first anesthesia on the same animals and following sedation and induction pattern of the first group, maintenance was done with administration of 2% of halothane in a semi closed anesthetic system.

In group I 0.161±0.84mg/kg/min of propofol was administered. Systolic, diastolic and mean blood pressure were decreased significantly (p<0.05) but in the group II no significant difference were recorded. Other findings except temperature that decreased significantly in the group II have no significant difference.

Extubation time in group I, and group II were record ed as (28.7±18.7) and (37.6±9.15) respectively and time for standing in the group I and group II were recorded (68.8±50.3) and (65.8±25.67) respectively. No significant difference was recorded between these timings.

In according to results, it seems that except decrease in blood pressure propofol TIVA could be a good substitute for halothane anesthesia.
COMPARATIVE EFFECTS OF PROPOFOL "TIVA" AND HALOTHANE ON CANINE COAGULATIVE FACTORS

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Abstract:
Evaluation of coagulative status before and during surgery in order to elimination of hemorrhage during or after surgery is important. In present study we compare effects of one hour Propofol anesthesia and Halothane in dogs on coagulative factors PTT, PT, CT, BT. 10 dogs selected and randomly divided in two groups. All of the animals premedicated with Xylazine Hydrochloride (2 mg/kg), anesthesia was induced with Propofol (3 mg/kg) as a bolus injection. In group 1 (20/8±2/91 Body weight) anesthesia maintained with continuous infusion of Propofol and in group 2 (21/1±3 Body weight) maintenance of anesthesia was done by usage of Halothane. Blood samples were taken before anesthesia (S−1), 45 minutes after induction (S0), recovery (S1) and 17 hour after anesthesia (S2) from cephalic or Saphenous vein. PTT, PT and CT calculated in above times but BT measured at induction (S−1), 45 minutes after induction (S0) and recovery (S1).

<table>
<thead>
<tr>
<th>Group 1</th>
<th>S₁₀</th>
<th>S₀</th>
<th>S₁</th>
<th>S₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTT</td>
<td>16±3/6</td>
<td>18±6±4/43</td>
<td>15±8±2/12</td>
<td>15±8±2/68</td>
</tr>
<tr>
<td>PT</td>
<td>6/2±0.40</td>
<td>6/8±2/17</td>
<td>5/6±1/81</td>
<td>5±6±0.08</td>
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<tr>
<td>CT</td>
<td>239±153/7</td>
<td>213±204/2</td>
<td>536±32/8</td>
<td>48±6/71</td>
</tr>
<tr>
<td>BT</td>
<td>43/8±12/1</td>
<td>5/13±15/1</td>
<td>50±17/68</td>
<td>48±13/51</td>
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</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th>S₁₀</th>
<th>S₀</th>
<th>S₁</th>
<th>S₂</th>
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<tbody>
<tr>
<td>PTT</td>
<td>15/6±0/014</td>
<td>15/6±0/26</td>
<td>16/8±1/26</td>
<td>15/8±2/12</td>
</tr>
<tr>
<td>PT</td>
<td>6/2±0/447</td>
<td>6/2±0/447</td>
<td>6/8±2/328</td>
<td>5/6±1/81</td>
</tr>
<tr>
<td>CT</td>
<td>742±8155</td>
<td>463±402</td>
<td>463±402</td>
<td>463±402</td>
</tr>
<tr>
<td>BT</td>
<td>50±17/68</td>
<td>5±17/68</td>
<td>48±13/51</td>
<td>48±13/51</td>
</tr>
</tbody>
</table>

All data were tested by RM ANOVA and 0.05 were considered as significance level. No significant changes were recorded during or after anesthesia in each group and except CT which was significantly shorter in group 2 there weren't any other significant differences between two groups.
ANATOMIC EVALUATION OF CAPRINE HOOF IN ORDER TO ACHIEVE
A STANDARD METHOD FOR HOOF TRIMMING (A PRELIMINARY
REPORT)

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Abstract:
Goat is one of the most important species among farm animals in specific areas. Predominant
member of most of flocks in specific areas are goats. By improving methods of housing and intensive
animal production some changes especially in growth and shearing of the hoof has happened. Proper
hoof trimming is the most important factor to provide hoof health and function. Hoof trimming was
described completely in other species, specially cattle and horse.
In order to achieve anatomic specifications of caprine hoof to be used in hoof trimming, 17 Sanen
goats (42.17± 6.55 BW), aged between 2-5 years were selected. All of the animals housed in intensive
system for at least two months and the last hoof trimming was done 6 months ago. Toe length, Sole
length and heel height were measured.
Heel height in lateral digits (2.66 ± 0.41) in forelimbs was more than medial digits (2.57 ± 0.45).
Also toe length in lateral digits (3.8 ± 0.43) was more than medial digits (3.67 ± 0.29). Also sole length
in lateral digits (4.98 ± 0.42) was more than medial ones (4.88 ± 0.53). Although there were not any
significant difference between different measurements, but it seems that hoof growth pattern in goat is
different from cow, as in cow, medial digit in forelimb grow more than contra lateral one.
35.5% of three years old goats were suffered from hoof malformations and 59% of malformations
were recorded in animals older than three years. 41% of malformations were recorded in animals under
39 kg and 59% were recorded in goats above 39 kg. It seems that malformations increase with age and
weight.
SURVEY OF INTOUSCIPSEPTION IN CATTLES REFERRED TO THE PRIVATE CLINIC IN BUKAN CITY, (WEST AZARBAIJAN PROVINCE)

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2: DVM, Urmia, Iran.
3:M.V.L.Sc, Urmia, Iran.
4: Veterinary laboratory science technician, Urmia, Iran.

Abstract:

Intussusception is one of the common complications of cows. In process of this disease that mainly occurs in jejunum, because of pristaltic movements of the intestine and considering the gradual increase of its diameter from proximal to distal, “Intussusceptum” will be gone into “Intussuscipten”. Signs of the disease include: restlessness in the first hours, tenesmous, kicking to the abdomen, dilatation of the right side of abdomen with “ping” sound. In a period of less than one month 10 cows with similar signs refered to the private clinic in Bukan City. So we decided to present a report of surgical treatment of them. Comparing the history of cases includes common results. Procedure of the surgeries briefly was right flank exploratory laparotomy. In according to the well prognosis for all operated cattles, except one of them-which more than one week passed since it’s clinical signs began- that unfortunatly sent to slaughter, other cases were be in good health.
SURGICAL REMOVAL OF MOSTO CYTOMA IN A DOG

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Abstract:
A three year old, male, indigenous dog with a dark, alopecic round bulge cutaneous mass on the right gluteal area was referred to the veterinary teaching hospital school of veterinary medicine, Shiraz university, Shiraz Iran. Clinical examination revealed heart rate, respiratory rate and the rectal temperature to be in the normal ranges.

Thoracic radiography was performed and there was no sign of metastasis. The diameter of mass was 5cm, its height was 3 cm and seemed to be firm and localized in the area with few attached extension dorsally and caudally. There was no ulceration. Anesthesia was induced by Acetylpromazine (0.08 mg/kg), Diazepam (2 mg/kg) and Ketamine (10 mg/kg). The right hip and gluteal area was prepared for aseptic surgical intervention. A wide vertical elliptical incision was made and the skin was dissected to the center of the mass. The mass had extension caudally and dorsally which was dissected carefully and removed completely. The subcutaneous fascia and skin were sutured separately. The dog was recovered uneventfully. The mass was fixed in 10% buffered formalin, 5 µm sections were prepared, stained by Gimsa and Toluidin blue.

Histopathological examination revealed grade I mast cell tumor with large numbers of mast cells, a central round nucleus, single small nucleolus and abundant, well granulated cytoplasm. There was little cellular variation, one mitotic cell per high-power field and diffusely scattered eosinophylis among tumor cells. The collagen fibers were denatured. There was no metastasis and the tumor had a definite local malignancy. The proof of the diagnosis of mast cell tumor lies in the demonstration of the dark cytoplasmic granules. The follow up the dog no recurrence or other complications reported.


UMBILICAL HERNIA IN CALVES (REFERRAL CASES TO
SHAHERKORD UNIVERSITY VET CLINIC)

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2: Department of Clinical Sciences, Veterinary Faculty, Shahrekord University, Shahrekord, Iran.
3: Department of Food Hygiene, Veterinary Faculty, Shahrekord University, Shahrekord, Iran.

Abstract:
Hernias occur when abdominal contents protrude through a natural or abnormal opening in the body wall. They may be congenital or acquired. In acquired hernias, there is usually a history of trauma. In congenital form such as Umbilical hernia, abdominal contents protrude from umbilical ring into the overlying subcutis. Size varies depending on the extent of the umbilical defect and the amount of protruded abdominal contents depended on ring size. Treatment involves medical and surgical procedures.

Umbilical masses that were referred to Shahrekord Veterinary clinic from 1377-1383 were summarized.

Although the most cases were referred in spring and less cases referred in summer but there were not significant difference in referral rate. The most referred cases were female and it was significantly higher than males.

It seems because of genetic predisposition of this kind of defect and financial cost-benefit analysis in the other hand most cases are female. Higher frequency of referral in spring maybe related to current working situation in rural dairy farming.
COMPARATIVE EFFECTS OF PROPOFOL "TIVA" AND HALOTHANE ON SOME CANINE HEPATIC ENZYMES

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Zaer1359@yahoo.com
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Abstract:
Evaluation of hepatic enzymes before and during surgery in order to investigate anesthetic effects on liver enzymes and prevention from hepatic damages is important. In present study we compare effects of one hour Propofol "TIVA (Total Intravenous Anesthesia, Group 1)" or Halothane (Group 2) in dogs on Alkaline Phosphatase (AP), SGOT and SGPT. 10 dogs selected and randomly divided in two groups. All of the animals premedicated with xylazine Hydrochloride (2mg/kg), Anesthesia was induced with Propofol (3 mg/kg) as a bolus injection. In group 1 (20.8±2.91 BW) Propofol and in group 2 (21/1±3 BW) maintenance of anesthesia was done by usage of Halothane.

Blood samples were taken before anesthesia (S0), 45 minutes after induction (S1), recovery (S2) and 17 hour after anesthesia (S3) from cephalic or saphen vein. AP, SGOT and SGPT calculated in above times.

Group1:

<table>
<thead>
<tr>
<th></th>
<th>S0</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
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<tbody>
<tr>
<td>AP</td>
<td>70±18.48</td>
<td>68±18.43</td>
<td>73.4±15.31</td>
<td>68.8±22.99</td>
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<tr>
<td>SGOT</td>
<td>24±7.21</td>
<td>24.2±3.11</td>
<td>25±2.65</td>
<td>29.8±7.69</td>
</tr>
<tr>
<td>SGPT</td>
<td>21±6.40</td>
<td>24.4±5.13</td>
<td>25.4±4.04</td>
<td>28.6±4.51</td>
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Group2:

<table>
<thead>
<tr>
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<th>S1</th>
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<tbody>
<tr>
<td>AP</td>
<td>83±14.68</td>
<td>102.4±37.02</td>
<td>97.0±8.49</td>
<td>191±33.45</td>
</tr>
<tr>
<td>SGOT</td>
<td>25±8.28</td>
<td>29±6.08</td>
<td>28.6±4.39</td>
<td>49.2±8.7</td>
</tr>
<tr>
<td>SGPT</td>
<td>21.6±3.44</td>
<td>31.2±4.66</td>
<td>30±3.54</td>
<td>43±6.12</td>
</tr>
</tbody>
</table>

All data were analysed by RM ANOVA, and significant differences were measured by Student-Newman-Keuls Test and P<0.05 considered as significance level. With regard to results there were not any significant differences in group one but all enzymes increased significantly in group two(P<0.05). There were not significant difference in SGOT and AP during anesthesia but it was significantly increased after anesthesia. SGPT changes in all samples during Halothane anesthesia.

Increase in hepatic enzymes was reported previously and indicates negative effects of Halothane on liver function.
TOTAL MASTECTOMY IN GOAT

Shams Esfandabadi, N.; Bigham Sadegh, A.; Javdani, M.; Jalali, A. H.; Zayerzadeh, E.; Asadi, P.; Ahmadi, M.
1: Department of Clinical Sciences, Faculty of Veterinary Medicine, Shahrekord University, Shahrekord, Iran.
2: Final year student, Faculty of Veterinary Medicine, Shahrekord University, Shahrekord, Iran.

Abstract:
Total mastectomy maybe required following development of a fibrotic or granulomatous gland or with severs chronic abcessetion of udder and neoplasia. Mastectomy should be performing at the end stage of the disease. This surgery is a life saving procedure. A 4 years old female Saanen goat with signs of chronic mastitis was referred to veterinary teaching hospital of faculty of veterinary medicine of Shahrekord University. In clinical examination animal vital sings (respiratory rate, heart rate, temperature) was normal. The goat was submitted for total mastectomy. Surgical site shaved and prepared aseptically. Cranial epidural anesthesia was performed with lidocain 2% (4.5 mg/kg). Total mastectomy was done in dorsal recumbency with blunt dissection. Bilateral external vein and artery was legated near the external ring of inguinal canal. The resected tissues were sent for bacteriological and pathological evaluation. Skin was sutured with silk no 2 in interrupted continuous pattern in 3 different directions to decrease of stretch in the suture lines. Finally drainage was used to elimination of maintained dead spaces. Actinomyces Pyogenesis was derived from the lesion and severe fibrosis of mammary gland and abscess formation was the result of Pathological investigation.

4 weeks after surgery the goat was normal and incision line was healed completely and sutured material was removed and the goat discharge from hospital. Antibiotics (penicillin G Procaine 30000 IU/KG BW DAILY) for 4 days and corticosteroids (Dexametason 2.2 mg/kg) 1 dose was administered.
ATRESIA ANI IN CALF

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Abstract:
Atresia ani is a common genetic disorder in animals that usually accompanied by urogenital disorders. Affected animals suffered from abdominal distension, colic, depression, anorexia and in some cases congenital lack of the tail were reported. In contrast to several report of its genetic predisposition, its proper etiology is not well known.

Six calves with disability in defecation referred to Shahrekord, Vet college hospital during 2000-2001. Preliminary clinical evaluation revealed lack of anus in all of the animals and because of disability in locating blind end of the rectum on trans-cutaneous palpation or after surgical manipulation from anal area, Right flank colostomy were done in all of the animals. All animals hospitalized for 4 days and after getting the defecation ability from their right flank stoma released from the hospital. 66% of the animals were male and 33 were female. With regard to easy surgical method and its excellent results as salvage method it seems that Right flank colostomy can be a satisfactory salvage method for correction of colonic atresia in calves.
REPORT OF AN OUTBREAK OF FOOTROT IN SHAHREKORD AREA

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Abstract:

Footrot is a prevalent ovine disease in many countries that is economically important in all age groups. Footrot characterized by lameness and Dichlobacter nodosus and Fusobacterium necrophorum are the most important pathogens responsible for its pathogenesis. Furthermore climate, soil condition, nutrition, usage of zinc metal can play a role in its pathogenesis.

In a herd lameness that referred to Shahrekord University, 21 out of 160 sheep (54 ± 2.1kg) showed lesion in foot region. Deformed hoof, persistent dark and fetid pus under horny covering of the hoof were the most important clinical findings. 63% of affected sheep were over 6 month and 58% of them were female (ewe). Lesion in hind limb, forelimb and fore and hind limbs were 19, 39, and 41 %.

Lateral digit was affected in 52% and in 23% both digits were affected. Penicillin Streptomycin (50000IU/kg, Sc on top of the lesion), Copper sulfate 5% bath, trimming and improvement of ventilation status were used for treatment. Regarding to results it seems that older animals mostly affected in their lateral digit of forelimb.

Examination of new arriving sheep, culling vectors, and vaccination play an important role in control and prevention of the disease.
EMERGENCY ENTEROTOMY TO REMOVE A ROCK FROM ILEUM OF A TERRIER DOG

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Abstract:

Intestinal obstruction causes a variety of dramatic and life-threatening events, the most important of which are fluid and electrolyte disturbances and endotoxic and septic shock. Distention of the intestine proximal to the site of obstruction is the major cause of clinical signs.

In 9/10/04 a male 1 year old white terrier with 8.8 kg weight was referred to surgery section of small animal hospital of Tehran university from internal medicine department with the history of foreign body within the abdominal cavity. The dog had not eaten anything from 3 days ago and the clinical signs included vomiting, anorexia, and constipation. Radiographic findings showed a radiopaque mass in abdomen. The dog was sedated with Acepromazine Maleat (0.04mg/kg) and Ketamin hydrochloride (15mg/kg) and anesthesized with Halothane. Ventral midline of abdomen was prepared for aseptic surgery. In exploratory laparotomy a solid mass at the ileum near to iliocecal junction was detected. The intestines were dilated and congested in the proximal part of the foreign body. A 4 cm longitudinal incision was created distal to the mass on antimesentric side. The mass (a rock with 3*4*1.5 size) was removed with a forceps. The viability of the intestine controlled and the enterotomy incision was sutured in modified Gambee pattern with Dexon No 4/0. A part of omentum was sutured over the incision line with the purpose of localizing the infection. The celiotomy incision closed routinely and a stent bandage was applied over the incision line. Antibiotic therapy included Cefazoline (22 mg/kg) every 8 hours for 6 days and Amikacin (5mg/kg) every 12 hours for 6 days were performed. Two days before and three days after operation, fluid therapy was performed. General condition of the patient and clinical signs 12 days after operation were satisfactory.
EVALUATION OF LAMENESS IN HORSES OF AHVAZ CITY

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Abstract:
To evaluate the prevalence of lameness disease and its correlation with faulty conformation, four separate stables with about 50 Arab horses representative to approximately 100 horses of the city were intended to be checked regularly to observe any evidence of lameness, its predisposing factors and consequences, in a range of 13 months from Oct.2003 to Nov.2004.

Our diagnostic tools were limited to physical examination and diagnostic imaging including radiography and ultrasonography. We calculated the percentage of diseased horses, the prevalence of each certain problem and the relationship between them and faulty conformations. Also an attempt made to determine the prevalence of these malconformations solely in our selected population. Approximately 24% of these horses presented locomotory system disorders of which 8.33% was belonged to Lacerations, 8.33% to Traumatic denervation, 8.33% to Laminitis, 8.33% to Chip fracture of fetlock joint, 8.33% to Bucked shins, 24.99% to Tendonitis, 8.33% to Splint bone fracture and 24.99% to Malconformations individually.
THE STUDY OF GASTRIC DILATATION VOLVULUS ON HEMATOLOGICAL PARAMETER (EXPERIMENTAL EVALUATION)

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Abstract:
Gastric dilatation accompanied by torsion around mesenteric axis is called gastric dilatation volvulus, which is one of the most important and life threatening conditions in carnivorous, especially in large and deep chested dogs. GDV has dramatic systemic effects. The most common laboratory findings are metabolic acidosis and hypokalemia. These changes reflect secondary to the organs damage. This is an emergency disease that must be treated as soon as possible. In studying the existence references, up to now, there are few researches about this event shortly after it occurred. Therefore, in this study, after experimental induction of disease, in early stages of initiation, clinical signs and blood parameter were evaluated and results were discussed. For this study, 12 Iranian dogs, with average age of 2 and weight of 25 kg, of both sexes were used. They were examined clinically and dewormed. Blood samples were collected from cephalic vein for complete blood count prior to the experiment. The dogs were divided into three groups; the first group (control 1) underwent laparotomy and abdominal manipulation. The dogs of the 2nd group underwent laparotomy, dissection of hepatogastric ligament and manual torsion of about 180 degree without gastropexy. The dogs of 3rd group were treated similar to the 2nd group but the stomach was fixed to abdominal wall. Hematological tests were repeated an hour and 3 hours post operation. It was concluded that in the case of clinical gastric torsion, it should be treated as an emergency before hematological alteration deteriorates the general condition of the animal. Since in long studying cases there would be ischemia and necrosis of stomach wall and the animal would expire due to perforation, sepsis, and shock.
THE REPORT OF PUTTING INTRA MEDULLARY PIN IN FEMUR BONE OF A DOG

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Abstract:

Long bones fractures are the major matters that most of veterinary clinics deal with. On the other hand, among body's bones, femur bone, is the biggest and the densest bone and so there is a big risk for Osteomyelitis and not repairing about this bone. This is why, the fracture cure has a specific importance. In the summer of 2004, a case of an adult male dog from terrier ethnicity which suffered from lamness and fracture in left foot - because of an accident - was delivered to central veterinary clinic of Isfahan. During clinical examinations, there was a probability for femur bone fracture. For confirming the diagnosis, two radiographies from Ventrodorsal and Lateral views were taken. The radiographies showed a kind of complete fracture in proximal extremity of femur bone. (The fracture was a close kind and the edges weren't in the same line.) After a 12-hour off-feed and accomplishing surgical primaries, sedation with Acepromazine and anesthesian induction with Ketamin were done. After that, with concerning to aseptic subjects, surgical incision in the lateral position of femur was done. The intramedullary pin, size 2, was put in bone marrow, following Retrograde way. Finally in order not to move and to be fixed, the discussed plaspering and in order to prevent from probable infections after surgery, antibotical cure with combination of Penicillin and Gentamycin was prescribed. Radiography after surgery could obviously show the appropriate remedy of fracture parts and formation of callus bone.
A CASE REPORT OF CONCURRENT POLYCHERIA AND POLYCARPIA IN A HOLSTEIN HEIFER

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Abstract:
Congenital abnormalities of the limbs are uncommon in farm animals. Among them, Polycheria and Polycarpia are rarely reported condition in large animals. A 3 month old Holstein heifer was referred to the Clinic of School of Veterinary Medicine, Ferdowsi University of Mashhad due to congenital abnormality of the forelimb. Clinical examination revealed an extra carpal joint, a single third metacarpal bone and single first, second and third phalanges. Routine surgical preparation was made for surgical intervention. Under general anesthesia the extra limb was cut off completely, as well as extra carpal joint. Sterile bandage was applied at the surgical site. Penicillin G procain, 20000 IU/kg, q 24 h, IM, was administered for supportive therapy. Fourteen days later, the skin sutures were removed and there was no evidence of abnormalities in gait and posture.
A DESCRIPTION ON USING LAPAROSCOPY IN SEX DEREMINATION
OF MONOMORPHIC BIRDS IN COMPARISON WITH OTHER
AVAILABLE METHODS

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Abstract:

Sex determination of monomorphic birds has a great importance because there are different capabilities for imitating human speech between male and female monomorphic cage birds, and this is important in their cost evaluation also it is very important for reproduction. Nowadays there are four techniques available for sex determination of these birds: 1) Chromosomal Analysis, 2) DNA Probe, 3) Evaluation of fecal steroids, 4) laparoscopy (surgical sexing). The latter has specific advantages in comparison with other three techniques.

Laparoscopic sex determination first demonstrated in 1984 by Samour et al (1984) using fine diameter rigid endoscopes. The diameters of trocars differ from 1.7 to 5 mm with the birds' weight. Materials needed for this method are cold light source, flexible fiberoptic cable, human arthroscope, trocar and cannula. Proper back to table positioning has a great importance to identify the anatomical landmarks. Both local and general anesthesia can be used but the latter is better. For applying trocar a 4 to 7 millimeters long incision performed. After application of trocar in standard points, in males two testicles can be observed in right and left sides of the kidneys, they can be round to oval bodies yellow colored and some times dark green to black pigmented with melanin. In female there is one L shape ovary in left. At the end, the skin and underlying muscle sutured in single interrupted pattern.

Laparoscopic sex determination technique can be performed easily in a short time even in a private clinic. This technique is preferred to other methods in all aspects except the risk of anesthesia and surgery. In this method it is possible to examine other internal organs to identify undergoing internal disorders (for example in the studies of M. Taylor internal problems were seen in 26 birds of the 271 birds selected for laparoscopic sexing.).

According to the literature and clinical trial researches in field of laparoscopic surgery which was perfectly performed in Small Animal Hospital, department of surgery in the University of Tehran, the laparoscopic sex determination would be a practical technique in our country that is beneficial to be introduced to Iranian veterinary clinicians.
EVALUATION OF EMETIC EFFECT OF XYLAZINE IN DOG

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Abstract:
Xylasine is a sedative drug that is classified as \( \alpha_2 \) agonists with analgesic, sedative and muscle relaxant effect. Xylazine has peripheral and central effects. Emesis is commonly induced by xylazine in cat and occasionally in dog because of direct stimulatory effect upon the emetic center. Alpha adrenergic and dopaminergic blocking agents don’t prevent xylazine–induced emesis. In contrast to the dog and cat, xylazine does not elicit emesis in cattle, sheep, goat, horses and some other species.

2mg/kg of xylazine hydrochloride was injected to 10 dogs of mix bred. All of the animals were fasted for 24 hours before injection. Sings of vomiting with abdominal contraction and regurgitation was recorded. Vomiting occurred only in two dogs (20%).

The frequency of emesis is lesser than similar reports in other studies that might be related to breed difference.
MAMMARY COMPLEX CARCINOMA IN MALE DOG (A CASE REPORT)

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Abstract:
A 4-year-old intact male mixed-breed terrier was presented to the Small Animal Hospital, Faculty of Veterinary Medicine, University of Tehran, due to the presence of a growing three-month old mammary mass. Physical examination revealed multiple solid masses in inguinal and caudal mammary glands. Radiographs of thorax and ultrasonography of the abdomen and the pelvis showed no evidence of metastasis. Other body systems appeared normal. The masses along with the surrounding tissues and associated lymph nodes were removed, using the total mastectomy technique. Macroscopically, the masses were solid, lobulated, and the cut surface was homogenous and reddish in color, without any necrosis or hemorrhages. Microscopic examination revealed epithelial and myoepithelial components which had undergone neoplastic changes. The luminal epithelium-like cells were arranged in a tubular fashion and the spindle cell type of myoepithelial-like cells had a reticular arrangement. Based on the biological behavior and pathological findings (absence of capsule, infiltrative growth, high cellularity, and high mitotic index) the tumor was diagnosed as a complex carcinoma of the mammary gland. Surgical removal of mammary masses is the choice treatment in this type of tumor. This is the first report of this type of cancer in domestic animals, in Iran.
STATISTICAL SURVEY OF LAPARORUMINOTOMY IN TRP CASES IN BUKAN CITY (WEST AZARBAIJAN PROVINCE)

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Abstract:
Traumatic reticuloperitonitis is one of the most common complications. Especially in areas which traditional husbandary methods are usual, incidence of TRP will be higher. During the year from September 2003 to September 2004, 142 cows and 2 goats with TRP diagnosis were referred to the clinic. Among them, nearly all forms of the disease have been observed and recorded. The brief statistics of cattle which had operated is followed. In 24 cases, foreign bodies were found outside of alimentary canal that eventually in paying more attention in exploring the peritoneum. From these 24 cases, 18 cases had only undergone laparatomy. 118 cases had undergone laparoruminotomy. The two mentioned goats because of eating razor blade and blocking of cardia and obvious inflammation and tensity of the condition, were sent to slaughter. Generally, in addition of mentioning the beneficial function of the magnet in getting foreign bodies, especially of the penetrative type, yet signs of injury of the reticular wall were observed in these animals that indicates the wide dispersion of foreign bodies in the region pastures.