

A bacteriologic study on hepatic abscesses of goats slaughtered at the Urmia abattoir

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Abstract

Hepatic abscesses have a major economic impact on the stock-breeding industry because of liver condemnation and reduced animal performance and carcass yield. This research was aimed to determine occurrence and bacterial causes of hepatic abscesses of goats slaughtered at Urmia abattoir. Post-mortem examination of 1200 goats (680male, 520 female) showed that 6 (0.5%) exhibited hepatic abscesses. Three (0.58%) abscesses were found in female and 3(0.44%) abscesses were found in male. Most of the abscesses were found in the right lobes (50%) and in diaphragmatic surfaces (50%) of livers. Regarding the presence of abscesses, there was no significant difference between sexes, lobes and surfaces of livers ($p>0.05$). The abscesses were cultured for aerobic and anaerobic bacteria. The following six species of bacteria were identified: *Corynebacterium pseudotuberculosis* (3 cases), *Arcanobacterium pyogenes* (2 cases), *Escherichia coli* (2 cases), *Fusobacterium necrophorum* (1case), *streptococcus* spp. (1case), *Pseudomonas* spp. (1case).The result of this study showed that *C. Pseudotuberculosis*, the causative agent of caseous lymphadenitis, is the most important cause of hepatic abscesses in goats in Urmia. In the present study *F. necrophorum* is reported for first time from goat hepatic abscesses.

Keywords: Hepatic abscess, goat, Bacteriology, abattoir, Urmia

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A seasonal survey of Magnesium serum level in pregnant cross breed cow in Tabriz abattoir

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Abstract

The magnesium, being one of the most important metabolic elements, has a very major function in the animals growing processes. Also magnesium has a function in structure and operation of many important enzymes which are effective in metabolic reactions of body. Reduction of serum magnesium rate may conduce to weakness of immune system, increase of sensitivity to infectious diseases, growth drop, sexual and breeding disorders, etc. In this study, during four seasons of year, the bleed accomplished by using venoject tubes (obtained from jugular vein) from sample randomly, on 400 pregnant cross breed cow, apparently healthy at Tabriz abattoir. Immediately, all of the blood samples were transferred to laboratory beside the ice packs. The end of each season, after centrifuging, the serum mg levels were measured by Randox biochemical kit, and using the spectrophotometry method and then results analysed. In this study mean serumal rate of magnesium varied in different seasons (there was a correlation between Mg levels and seasonal temperature changes). The lowest level of Mg was measured in winter that according to statistical analysis (ANOVA, $P < 0.001$) these variations statistically was significant. Results of recent study also showed that there is a significant correlation between the age of dairy cattles and their serumal Mg levels (elder cattles had higher serumal levels of Mg, $P < 0.001$). According to results of pierson correlation ratio test there was not significant relation between fetus age of pregnant cows and Mg levels. This clear reduction Mg level of serum in winter may be the result of excessive using hay in diet, on available to green grass and also the excessive cold weather in winter.

Keywords: Season, Serum, Magnesium, Cow, Tabriz abattoir

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The survey of ALP and GGT changes in cows affected to theileriasis

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Abstract

Theileriosis is a protozoan disease of tropical and subtropical areas. The main cause of bovine theileriasis in Iran is *Theileria annulata*, which is transmitted by ticks of the *Hyalomma*. Commonly every year in warm seasons, theileriasis incidence or prevalence by the activity of ticks. In this study 50 cows affected to theileriasis were studied. Blood samples were taken from infected cows and their blood sera were taken. Using laboratory kits of the enzyme ALP and GGT the level of the activity of these enzymes in the sera of affected cows was measured with spectrophotometer and following results were obtained. The amount of ALP and GGT enzymes in affected cows was higher than the normal amount of them in healthy cows. Based on results in this study the average level of ALP activity in affected cows was 221.75 U/lit compared to 200 Unit in healthy cows, that reflecting a slight increase. For the enzyme GGT in infected cows the mean level of activity was 40.89 U/lit, and it showed a significant increase compared to the normal level in healthy cows. The increase in the activity of GGT enzyme in infected cows was more than that of ALP in this cow.

Keywords: Theileriasis, cow, ALP, GGT

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Histogenesis study of the Auerbach's plexus in gastric of one-humped camel (*camelus dromedarius*)

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Abstract

Since the present study aim at investigating histogenesis of the auerbach's plexus in fetus of one-humped camel. At 2 months of gestation until birth with according to age distance, 66 fetuses were collected of slaughter houses in semi-desert cities of Iran. After determining the fetuses age with C-RL (Crow-Rump Length) criterion, they were sent in 10% formalin to histological laboratory and after dissecting the fetuses gastric of abdominal cavity, with use of routine methods, were performed serial section with 8-10µm-thick of them. The section were treated and investigated with Nissl's staining method. The results of the microscopic section indicate that the auerbach's plexus in the third compartment's was formed at 113 days of gestation and in the first and second compartment of gastric were formed at 137 days of gestation in connective tissue between tunica muscularis that with increasing fetuses age , the auerbach's plexus was developed, too.

Keywords: histogenesis, auerbach's plexus, nissl's staining, one-humped camel

The effect of body condition score on some blood biological parameters and reproduction performance of Fat tail Afshari Sheep

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Abstract

The effect of body condition score (BCS) and body weight of fat tail Afshari sheep at mating time on reproductive performance were studied . Total 162 fat tail Afshari ewes (3-7 years old) randomly selected from animal unit of Zanzan University. Ewes divided to 4 treatments groups according BCS (2, 2.5, 3, 3.5 and more). The reproductive parameters such as lambs born to ewes after mating, number of lambs born per lambing, Kg lambs born per ewe mating, pregnancy period , lambs birth weight, and some blood metabolites such as glucose, total protein, albumin and globulin were determined. The result of this study indicated that BCS had a significant effect ($P<0.05$) on the lambs born per ewe at mating. Ewes with BCS =3 had a better performance in lambing rate and Kg lambs born per ewe. While the lambing rate reduced in ewes with BCS of 3.5 or more. Ewes with BCS=3 had more ($P<0.05$) normal estrous while ewes with low BCS had shorter estrous period. Birth weight of lambs was significantly affected by body weight of their dams ($P<0.01$) but BCS had no significant effect on lambs' weight at birth and weaning. There was significant effect of BCS on plasma FSH concentration in ewes with BCS more than 3 but no significant differences was seen in blood metabolite parameters in this study. It is concluded that BCS had significant effect on lambing rate and lambs born per ewe ($P<0.05$). The BCS of 3 at mating time could optimize profitability of Afshari ewes.

Keywords: Afshari ewes, Body condition score, Some Blood biological parameters, Reproduction performance

Serologic prevalence of human toxoplasmosis in the Mianeh city By Chemiluminescence's method

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Abstract

Toxoplasmosis is one of the most common causes of human parasitic infections and other vertebrates, which has extensive worldwide distribution. The aim of this study served to determine the level of human toxoplasmosis infection in Mianeh city is moderate in 2009. Methods: In this cross-sectional study of serum 200 men and women admitted to city level laboratories in the mid 2009 randomly selected after completing a questionnaire, the presence of IgG and IgM antibodies against *Toxoplasma gondii*. The results using the Chi square test were statistically analyzed. Of 200 blood samples examined, 82 samples, 41% have IgG antibodies and 16 samples, 8% had IgM antibodies to meet the 68 patients with chronic infections and 14 infections were acute or sub acute toxoplasmosis. The results showed that between toxoplasmosis and education level, age, marital status and occupation of those statistical relationships exists between gender, but individuals, contact with cats, soil, half-cooked meat, how to wash vegetables and history of hospitalization there was no significant relationship. Discussion: The results show high prevalence of *Toxoplasma* in the Mianeh is about the same prevalence of IgG and IgM positive shifter somewhat higher than rates reported in similar studies conducted in the northwest region. And this can be partly due to high sensitivity and specificity of quantitative Chemiluminescence's technique than other methods in the diagnosis of *Toxoplasma* Serology is.

Keywords: Toxoplasmosis, seroprevalence, Mianeh, Chemiluminescence's method

Compare the therapeutic effect of honey on cutaneous leishmaniasis in the laboratory and human by Glucantim

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Abstract

Cutaneous Leishmaniasis show different form of clinical sign, the wound getting larger gradually and plague wound at the end will appear at the bite site. Long term treatment, drug resistance, delay in healing, treatment with chemical drug, there side effect, painful, high cost medication are the main reason of this research in comparison with Glucantime. Number of 30 mice with samples of Leishmania prepared infected and to determine the incidence of ulcers, they in the environment of cultured NNN and RPMI. Following's a culture we have. Of the 30 samples 20 samples treated with honey, 10 samples were selected as controls. By the legal permission and application forms prepared from before, 24 patients, preparing biopsy and culture test (NNN) from there wound, divided in 2 groups, a group (treatment with honey) and B (treatment with glucantime) were under study. Total 30 samples of animals with wounds treated with Leishmania and extract them to count the number 8 for 18 days; 16 days and 5 number 7 number average length of 22 days and recovered in 18-19 days. Diameter 4/0-3/0 mm ulcer rate was reduced daily. 10 control samples number 3 and the rest died within 70 days showed partial improvement. Wound healing of the patient in group A show more affective in comparison with chemical drug ,the healing period of honey on the leishmaniasis infection of 9 patient average time were between 23 to 25 days and in 3 others patient of this group were between 34 to 38 days, In group B healing period of the wound of 7 patient were between 160 to 180 days and 5 other patient of this group there wound heal after 220-230 day. The other founding, regarding the control of diameter of the wound in the patient those person how had used honey there wound diameter extension were stop much more sooner than those patients had chemical drug. The honey (combinational of drug) used in this study can be suitable replacer drug against chemical drug treatment. Also the honey able to improve scar of Salak.

Keywords: Honey, Cutaneous Leishmaniasis, Salak, Glucantime

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Effects of different levels of multi-Enzyme on Liver enzyme changes and performance parameters in the grower's rainbow trout (*Oncorhynchus mykiss*)

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Abstract

Enzymes are organic catalysts, that can Trigger or accelerate chemical reactions and covert One or more organic compounds to organic production. This study was designed to investigate the influence of supplementing multi-enzyme on liver biochemical parameters (LDH, ALP, AST, and ALT) and performance parameters of rainbow trout growers (150 ± 5 g). The multi-enzyme were incorporated into a commercial pellet ration to constitute three experimental diets containing 500, 1000, 1500 gram multi-enzyme per one ton feed intake, while a fourth diet without the multi-enzyme supplement served as the control diet. Fish were sampled at 10, 20, 30 and 40 days after commencement of the feeding trial to determine feed conversion ratio (FCR), weight and length rate and survival rate. At the end of the raising period 50 fish from each and finally 200 fish were selected randomly and blood sampling performed and then liver biochemical parameters were measured. Results of our study indicated that effect of different supplementing multi-enzyme levels on feed conversion ratio (FCR), weight and length rate and survival rate, there was not any meaning relation in dose rates ($p > 0.05$). In this study, 1500 g/ton group displayed significantly reduction ($P < 0.05$) AST levels compared to 500 and 1000 g/ton groups. The result showed that 500g/ton group displayed significantly reduction ($P < 0.05$) ALT levels compared to control group. 500, 1000 and 1500g/ton groups displayed significantly reduction ($P < 0.05$) LDH levels compared to control group. Also, There was no meaningful relationship between multi-enzyme level in ration ALP levels ($P > 0.05$). According to this study, the use of multi-enzymes, can reduced amounts of ALT, AST and LDH levels in rainbow trout growers. Therefore, taking these supplements can be recommended, in considered values for use in aquaculture.

Keywords: multi-enzyme, ALT, AST, LDH, ALP, rainbow trout

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Comparative inspection about infection to salmonella in different organs (heart, liver, ovary, feces) in slaughtered poultry of Urmia industrial slaughter house

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Abstract

Enterobacteriaceae family is the biggest crooked complex of negative gram basils that 40 genus and 150 type of it is identified. The important genus of this family is salmonella that can be colonize in all animals such as fowls, amphibians, rodents, birds, domestic and wild animals and human. Most infections are result of consuming infected food products and direct spreading of oral _ feces. The goal of this research is a comprising inspection of infection to salmonella in different organs (heart, liver, ovary and feces) by bacterial culture method in slaughtered birds in Urmia Industrial Slaughterhouse. Composed of two parts: A) culturing on first stage and enriched and selective cultures') Sampling method. After sterilizing the equipments in fur pasture and autoclave machines sampling was performed during a month. In each stage sampling was performed from (heart, liver, ovary and faces) of slaughtered birds in Urmia Industrial slaughter house. The samples were cultured in selenite F broth culture. After 24 hours incubation and enrichment the samples were transferred to McCankey agar, SS agar and XLD cultures. From 1440 taken samples that each 360 samples were due to each sampled part 170 infected samples by salmonella were resulted that 30 cases were due to heart, 40 cases due to liver, 60 cases were due to ovaries. Expect salmonella samples Escherichia coli, Proteus, Pseudomonas, Klebsiella oxi toka, Seratia were also isolated. Given the extent of contamination sources Salmonella is a necessary to control salmonella with Bacteriological and serological examination of persons working in slaughterhouses and the poultry industry to be brought.

Keywords: Enterobacteriaceae, salmonella, culture

Study on the prevalence of lungworm infection in the sheep and goat in Boroujerd slaughter house

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Abstract

A slaughterhouse survey was performed for one year during April 2008 and february 2008 in order to determine the prevalence of lungworm infection in both sheep and goat in Boroujerd slaughterhouse , Lorestan province Iran. Sixteen percent of 175 lungs of sheep and thirteen point fifty seven percent of 140 lungs of goat examined were infected with lungworms and the species found in infected lungs were *Cystocaulus ocreatus*, *Dictyocaulus filarial* and *protostrongylus rufescens*. mixed infections of *Dictyocaulus filarial* were detected in sheep 78, 57%, *Cystocaulus ocreatus* 67, 85%, *protostrongylus rufescens* 64, 25%. Mixed infections *Dictyocaulus filarial* were detected in goat 68, 42%, *Cystocaulus ocreatus* 57, 89%, *protostrongylus rufescens* 63, 25%. With $p < .05$ and chi square test was not any statistical difference between sheep and goat but was any statistical difference in the prevalence of lungworm infection according to season. *Muellerius capillaris*, were not found in sheep and goat lungs but *Cystocaulus* was seen in worm nodules.

Keywords: Boroujerd, Goat, Sheep, lungworm, Slaughter house

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Effect of temperature on the pattern of antibiotic resistance in *Escherichia Coli* Isolates from poultry

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Abstract

Escherichia coli are highly pathogenic bacteria in human being and animals. Extraordinary Antibiotic consumption in animals and poultries for controlling of E-coli can cause antibiotic-resistance in these microorganisms. One of these resistance methods is plasmid-based resistance in these bacteria. Some of the plasmids are heat-sensitive and destroy in inadequate overheating. The main aim of this study was evaluation of antibiotic-resistance ability by using the heat in E-coli isolated from poultry. Among this study 25 E-coli (probable) samples isolated from infected broilers. Then samples transferred to bacteriology laboratory and cultured in Mc-Kanky agar specific medium. In next stage these samples were transferred to differential Enterobacteriaceae family media for identifying the bacteria species. Then isolates transferred in two different BHI media and each one simultaneously incubated in 37°C and 43.5 °C. In last stage the sensitivity to proper antibiotics were measured by using disk-diffusion (Kirby Bauer) method based on CLSI criteria. The results were evaluated in both incubated (37°C and 43.5 °C) groups in three different categories: sensitive, intermediate and resistant. The highly antibiotic-sensitivity in this survey was seen in incubated E-coli isolations with Chloramphenicol discs (52% & 56%) in both temperatures and greet antibiotic-resistance was observed in groups with Erythromycin 92% discs but no significant different was seen in reduction of bacterial antibiotic-resistance in two different temperatures incubated E-coli isolations.

Keywords: E-coli, Antibiotic-resistance, Heat

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