NO : 63
TITLE : Parasitological and Epidemiological Studies on Some Cestodes of Dogs in Assiut.
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SOURCE : Thesis (M.Sc) 2003

ABSTRACT

The prevalence of cestode infection in stray dogs was (65.7%). The highest incidence (24.3%) was recorded in Autumn and the lowest was (11.4%) in Spring; while in both Winter and Summer were nearly equal (15.7%) and (14.3%) respectively. In relation with the sex of dogs, males showed a higher infestation rate than females, being (71.1%) for males and (59.4%) for females. Dipylidium caninum was the predominant species, has the prevalence of infection was (45.7%). That was followed by Taenia pisiformis (18.5%) and T. hydatigena (15.7%). The other parasites; T. ovis, T. taeniaeformis and E. granulosus were found in a lower percentage being (4.2%), (1.4%) and (1.4%) respectively. For the first time T. ovis was recorded in Assiut. Image analysis system was used to determine the size of rostellum, suckers and hooks. In dogs: Experimentally infected 5 puppies with hydatid cyst of camels origin revealed Echinococcus granulosus after 41 days post-infection. Completely developed genitalia appeared at 41 d.p.i. On rabbits: Experimental infection of 5 rabbits with Taenia pisiformis revealed Cysticercus pisiformis after 35 days post-infection. The number of cysticerci ranged between 2-9.
ABSTRACT

To describe some clinical aspects and some biochemical changes in goats infested with internal and external parasites, a total of 515 male Balady goats (5-10 months) were randomly selected from some periurban arias at Assiut Governorate. Results of faecal examination revealed presence of gastrointestinal parasites (4.85%) including nematodes (3.3%) as Trichuris spp., Trichostrongylus spp., and Haemonchus spp., protozoal parasites (Eimeria spp., 1.55%) and liver flukes (Fasciola gigantica and F. hepatica, 1.17%). External parasitic investigations revealed the presence of mange mite (Sarcoptic, 1.17%) and Lice infestation (1.55%) with a total of 2.72%. In addition there were 0.78% mixed gastrointestinal, 0.39% mixed external and 1.55% mixed internal and external parasitic infestation. Biochemical analysis revealed hyooalbuminaemia in all investigated goats, which resulted in hypoproteinaemia in nematode and fasciola, infested goats. On the other hand, the mean values of blood serum trace elements iron, copper and zinc concentrations showed variable degrees of reduction in goats infested with internal and external parasites. Statistical analysis revealed that both internal and external parasites had the same effect (P-value ranged from 0.203 to 0.667) on blood serum proteins and trace elements in goats.
Variation In The Susceptibility of Some Cowpea (Vigna Unguiculata (L.) Walp) Genotypes To Infestation With Certain Pests In Upper Egypt.

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ABSTRACT

Five cowpea cultivars were evaluated to clear the reflex of their characteristics to the infestation caused by the main sucking pests, Whitefly, Thrips, Jassids, Aphids, and Spider mite in northern upper Egypt at Assiut governorate during the two successive seasons of 2001 and 2002. Results revealed that the highest pests’ density were recorded on Tvu-21 cultivar. However, the lowest density were the most recorded on Six-Weeks and B-Crowder cultivars.

Regarding to the relative susceptibility to these pests six-Weeks and B-Crowder appeared to be resistant cultivars. However, Pinkeye and Ch-Reds appeared a low resistance. The Tvu-21 cultivar’s appeared as susceptible one. Also, the results showed that Tvu-21 was the susceptible to A.craccivora. There were no significant differences in number of pods/plant and seeds/pod among the spraying and not spraying plots. Tvu-21 cultivar’s produced the highest weight of 1000-seeds (g) in both seasons. On the other hand, the effects of 7 cowpea tested cultivars on development time, longevity and fecundity of T.urticae were evaluated at 25°C. Ch-Reds and IT82 D889 had the shorter life cycle of T.urticae than the other cultivars. Mites reared on Tvu-21, Pinkeye and IT 82 D889 had the highest fecundity (17.22, 16.22, and 15.75 eggs/female, respectively). The mites reared on Ch-Reds had the shorter life span (16.13 days). Based on the obtained results we concluded that the Tvu-21 and Pinkeye cowpea Cultivars were the most suitable hosts for the tested pests and Six-Weeks and B-Crowder were the least suitable.
ABSTRACT

An outbreak among goats and sheep at Aswan province, Egypt was observed. This outbreak manifested clinically by respiratory, ocular and digestive signs. To identify the cause of this outbreak, 100 goat and 100 sheep were in the study, some of these animals (70 goat and 45 sheep) were clinically abnormal while the rest of them (30 goat and 55 sheep) were apparently healthy. These animals examined clinically and serologically. Serological examinations included recent rapid competitive enzyme linked immunosobent assay (c-ELISA) and virus neutralization test (VNT) in order to detect the antibodies of the suspected aetiological agent of the outbreak. Clinical examination recorded fever, mucopurulent nasal and ocular discharge, erosive stomatitis, diarrhea and pneumonia. Clinical examination proved that clinical signs were more severe in goats than sheep. Some infected animals (13 goat and 6 sheep), as showed from serological results, were apparently healthy. 83 examined goat and 51 sheep were positive to rapid c-ELISA while VNT recorded 76 positive goat and 47 sheep. All samples gave positive result with VNT were positive with rapid c-ELISA. Clinical findings and serological results proved that the cause of the outbreak was the virus which causes peste des petits ruminants (PPR) in small ruminants. This study proved that rapid c-ELISA and VNT are sensitive techniques in diagnosis of PPR. However, it could be considered that usage of rapid c-ELISA seems faster and more sensitive than VNT. This is the first study concerning diagnosis of PPR by using rapid c-ELISA and the first to compare between rapid c-ELISA and VNT in diagnosis of PPR in Egypt.
For parasitological and pathological studies of *Atoxoplasma spp.* of pigeons in Assiut Governorate, 300 blood and faecal samples were examined. The incidence of infection with *Atoxoplasma spp.* was 4.33%. The incidence of infection was 11% in squabs while in adults it was 1%. In most infected pigeons the degree of parasitaemia was 1-2 parasite/100 WBCs while in 3 squabs it was 9-13 parasite/100 WBCs. Examination of impression smears of liver and spleen revealed presence of high incidence of parasite in the lymphocytes. The morphological characters of different forms of *Atoxoplasma* were described. Necropsy of highly infected squabs revealed that intestine was distended and contained creamy white content. Microscopically, it revealed necrosis and desquamation of intestinal epithelium. Many epithelial cells contained oocysts. The lamina propria of intestinal mucosa and also submucosa contained moderate to marked mononuclear cell infiltration and the lamina propria contained schizonts. The liver, spleen and kidneys were enlarged and microscopically they revealed marked inflammatory reactions represented by granulomas composed of mononuclear cells and heterophils caused by presence of *Atoxoplasma* parasite in cytoplasm of mononuclear cells. It is considered the first report of the pathological effect of atoxoplasmosis in pigeons.
ABSTRACT

One hundred and twenty random samples from cloacal swabs, intestinal content and liver (40 each) were collected from different districts in Assiut Province at the period from November 2003 to May 2004. These samples were examined to determine the incidence of campylobacter species. The obtained results indicated that 19 strains of campylobacter species were isolated with a rate of 15.8%. All isolates were identified as C. jejuni 17 isolates (14.1%) and C. coli 2 isolates (1.6%). Antibiotic pattern were determined for all isolates as well as the plasmid profile was performed to correlate between antibiotic resistance and plasmid carriage among these isolates. The results obtained revealed that all campylobacter isolates were sensitive to Gentamycin, Erythromycin and Norofloxacin. The pathogenicity test of C. jejuni was subjected in 45 day-old pigeons and in one day old chicks using different routs of infection. In pigeons the results revealed that there is no mortality among the examined pigeons. The clinical signs in experimentally infected squabs were depression, greenish diarrhae and reduction in body weight gain as compared with control group. The main lesions were congestion of internal organs and sever haemorrhagic enteritis with isolation rates of 50%, 75% and 85% by I/M, S/C and orally inoculation, respectively. C. jejuni were pathogenic to the experimentally infected baby chicks resulting mortality rates of 40, 20 and 10% by the same routs. The isolation rate from dead chicks reached 100%.
ABSTRACT

This study investigated 69 pigeon flocks for the role of Paramyxovirus (PMV) in serious problem of nervous signs facing both loft and individual raising pigeons in Upper Egypt resulting in severe economic losses. The morbidity and mortality rates in the infected pigeons were 20-94% and 10-90% respectively. No pathognomonic lesions were noticed in infected pigeons far form congestion of parenchymatous organs and enteritis. Forty–one strains of PMV could be isolated (59.4%) from 69 examined flocks. Six isolates were subjected for further characterization by SDS-PAGE and western blot analysis. Common polypeptide pattern was clear among the selected strains in SDS-PAGE but two isolates of them differed partially from the others and ND vaccinal strains, suggesting their relatedness to pigeon PMV. The intravenous pathogenicity index (IVPI)of the selected strains characterized 5 of them as mesogenic strains and one as velogenic strain. Serological survey of 63 serum samples displayed 35 (55.6%) possess haemagglutination inhibiting (HI) antibodies with HI titers 24-29. All the selected and ND vaccinal strains expressed a very major and highly reactive immunogenic epitope at 53 Kda, moreover there were close immunogenic relationship among pigeon PMV and ND vaccinal strains, the matter which may answer the question why we use ND vaccines for controlling PMV infection in pigeon.
ABSTRACT

A devastating stem rot disease of yucca aloifolia, an ornamental plant, was observed in the greenhouse of the Faculty of Agric., Minia University. Naturally infected plants showed typical symptoms of soft rot on the stems. Four isolates of motile, rod shaped, gram negative bacteria were isolated from soft rotted areas. All isolates were pathogenic to yucca plants and induce soft rot symptoms, however, bacterial isolates differed in their virulence. Through different biochemical tests, bacterial isolates differed in their characteristics. The isolated pathogenic bacteria was identified as Erwinia chrysanthemi. Host range studies revealed that the bacterium was able to produce soft rot on fruits of eggplant, tomato, squash, pepper, potato tubers, carrot, turnip, onion, chrysanthemum and sunflower. Stems of maize, cowpea, broad bean show no symptoms and remain unaffected. The extracts of experimentally diseased yucca stems were active in pectinase and cellulase. On the other hand, no enzymes activities were detected in healthy tissues. A correlation between the total and reducing sugars and the pathogenicity of the tested bacterial isolates were detected.
Biological Pollution

(Pneumonia)

NO : 71
TITLE : Adult Community Acquired Pneumonia In Assiut University Hospital.
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Dept. of Chest Diseases & Tuberculosis, Faculty of Medicine, Assiut Univ.**

ABSTRACT

Community–acquired pneumonia (CAP) is a common infections disease that is associated with significant mortality in both developing and mortality in both developing and developed countries. Due to the delayed results of many diagnostic tests, the antibiotic treatment for CAP empirically relies on epidemiologic data regarding the causative pathogens in a particular geographic area. Most studies showed that streptococcus pneumoniae remains the primary cause of CAP. The incidence of other microbial pathogens varies both seasonally and geographically. The present study was designed to evaluate the bacteriological profile of CAP in Assiut, Egypt. Patients and Methods, one hundred and one adult patients; with community acquired pneumonia were admitted to Assiut University Hospital from March 2002 to October 2003 were enrolled in this study. In all the patients sputum culture Bronchoalveolar Lavage (BAL) and Protective Specimen Brush (PSB) cultures as well as serological studies for the detection of specific IgM antibodies for Legionella, Mycoplasma pneumonia, Chlamydia pneumonia, coxiella, influenza A Virus, influenza B virus Para influenza virus and Respiratory syncytial virus by indirect immunofluorescence technique were done. Results: Causative organisms were identified in 95 patients (94%) in 6 patients we could not detect organisms by different techniques. The most frequent identified organisms in in Sputum were S. pneumoniae (45%), Coagulase Negative Staphlococcus (CoN staph) (30.9%) and Staph. Aureus (16.9%) In BAL S. pneumonia (23.7%) Staph. Aureus (14.4%) and klebsiella and klebsiella pneumonia (9.2%). for atypical micorganismand viral infection the most common pathogen were Legionella Spp. (35.7%), co plasma pneumonia (21.4%),Chlamydia Pneumonia in (14.2%) and Influenza A (14.3%) Conclusion : PSB and BAL cultures are more specific and useful for detection of the underlying pathogen than sputum examination Strep pneumonia is the most common implicated pathogen in CAP, followed by atypical pathogens. Serological examination must be done for detection of atypical pathogens as they represent about 25% of CAP cases. There is significant impact of age, smoking and co-morbidity on the severity of CAP. Malnutrition is considered an important risk factor for the development of CAP.
**NO** : 72  
**TITLE** : Campylobacter Jejuni Infection In Japanese Quail (Coturnix Coturnix) Isolation, Pathogenicity And Public Health Implications.  
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**ADDRESS** : Dept. of Animal Hygiene & Zoonoses, Faculty Veterinary Medicine Assiut University*  
Animal Health Research Institute, Assiut Regional Laboratory**  

### ABSTRACT

Existence of Campylobacter species that colonize quail gastrointestinal tract raised and slaughtered as a source of food for human consumption were studied. The higher the Frequency of isolation was obtained from intestinal tract & cecum, coloacal swabs, and liver in order Percentage of isolation of Campylobacter jejuni was 16-18% from intestinal tract, 10-14 % from coloacal swabs and 4% from liver. Isolation was done from different ages (6-24 weeks old ) investigated in this study. C. jejuni was the only identified Campylobacter species during this study. Time to death of chicken embryo in case of yolk sac inoculation ranged from 48-60 hours post-inoculation, and 48-72 hours post-inoculation in case of chorio-allantoic membrane (CAM) route. Died embryos showed severe enlargement and congestion of yolk sac, curling and focal hepatic involvment in case of yolk sac route. Severe congestion and enlargement of liver as well as congestion of embryos in case of CAM infected embryos. Oral infection in 12 weeks old quail revealed, only 15% of birds were died during observation period. Diarrhoea and saturation of vent plumage were only noticed clinical signs in 65% of birds. Most of examined birds showed enteritis and increased intestinal contents specially at dudenum, and jejunum, while some birds showed focal hepatic changes. Excretion of C. jejuni started from second day post- infection till the end of observation period. C. jejuni was reisolated from intestinal tract and coloaca in all infected birds. While isolation from oviduct and liver was done from some cases. Stool swab cultures from human resulted in isolation of C. jejuni from 17.9% of examined persons with bowl incontinences and 8.3% from apparently healthy persons dealing with quail either in rearing or in slaughter shops.
ABSTRACT

The mycoflora of 45 samples cereal grains (wheat, corn and sorghum) were collected from three governorates namely; El-Minia, Assiut and Sohag. These samples were studied using dilution plate method on glucose Czapeks agar medium at 28°C. Twenty-eight species belonging to thirteen genera were identified during this investigation. The broadest spectrum of genera and species was recorded in wheat (16 species and 8 genera); followed by sorghum (15 species and 8 genera) and corn grains (15 species and 8 genera). *Aspergillus*, *Penicillium* and *Fusarium* were the most common genera in the wheat and corn. Aflatoxins assay using thin layer chromatographic analysis revealed that, cereal grains were contaminated by aflatoxins B₁ and B₂ (1, 3 and 2 samples of wheat, corn and sorghum, respectively) and one sample of corn was contaminated by B₁, B₂, G₁ and G₂.
ABSTRACT

The first part of the present study was carried on the effect of praziquantel and flubendazole (either alone or in combination with each other) on experimentally infected mice with Schistosoma mansoni. Flubendazole which considered a new antischistosomal drug was given in this work in a single oral dose of 100 mg/kg body weight to mice experimentally infected with Schistosoma mansoni. It is the first time to examine its effect on the parasite by light and electron microscope. Praziquantel is given in a single oral dose of 300 mg/kg (as prophylaxes and as treatment). Flubendazole and praziquantel seems to affect the male tegument more strongly than female. The parasitological criteria used in assessment revealed that combined low doses of both drugs were superior to either of the drugs alone in their full doses. Biomphalaria alexandrina found to act as intermediate host for Schistosoma mansoni. In Biomphalaria alexandrina, out of the total number 8114 snails collected from seven localities in Assiut Governorate, there were only four snails (0.04%) infected, with Schistosoma mansoni in Sahel Salim, and other localities were free from infection with Schistosoma mansoni.
Mesophilic, osmophilic and thermophilic fungal flora in six kinds of popular confectionaries namely: Semsemia, Hommosia, Follia, Gozzia, Malban and Noga (10 samples of each kind were studied using dilution plate method). Follia and Semsemia samples were highly polluted with fungi whereas Malban samples were the lowest. Semsemia samples recorded the broadest spectrum of genera and species (16 species belonging to 8 genera). Aspergillus recorded the most common genus representing 48-67.6% of total fungal counts. The common species in all tested samples were A. niger, A. flavus and A. terreus. Some fungal species such as A. amstelodami and A. chevaleiri well known as osmophilic fungi were isolated only on 50% sucrose Czapeks agar medium. The fungal counts of tested samples were markedly lower when the plates incubated at 45ºC than at 28ºC either on 1% glucose Czapek's agar medium or 50% sucrose Czapeks agar medium; respectively. Sixty isolates of Aspergillus flavus (10 from each kind of sweets) were screened for aflatoxins producing-ability. Six isolates showed strong aflatoxins producing ability, seven were moderate, twelve were weak, seven not clear and twenty-eight were negative for their ability, isolates from follia and Semsemia contained the great number of strong and moderate aflatoxins producing ability.
**(Therapy)**

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<td>TITLE</td>
<td>Studies on Some Helminthes of Man in Abnoub City, Assiut Governorate with Special Reference to the Cestodes.</td>
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<td>AUTHORS</td>
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**ABSTRACT**

The efficacy of Praziquantel therapy on human infection with Hymenolepis nana and Taenia saginata was 100% following the single dose. But in case of Schistosoma haematobium cure rate 95% with single does. The efficacy of Praziquantel on S. lumntivoifrd, A.duodenale and E. vermicularis infected human was 33.3%, 43% and 38% following the first dose respectively.

**Toxoplasmosis**

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<td>TITLE</td>
<td>Studies on Cellular Immunity in Toxoplasmosis.</td>
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<td>AUTHORS</td>
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**ABSTRACT**

The results of immunohistochemistry revealed much more proliferation of the liver and brain tissues by T-cells. The cell mediated immunity is an important mechanism in recovery from Toxoplasma infection in both mice and humans. Toxoplasmosis is characterized by a response highly polarized toward a th-1 pattern of cytokine expression (high INF-y level and different levels of IL-4 and IL-10).
ABSTRACT

The intermediate hosts of T. gondii include sheep, goats, rodents, swine, cattle, chickens and birds. These host may carry an infective stage (cystozoite or bradyzoite) of T. gondii encysted in tissue, tissue cysts remain viable for long periods, perhaps for the life of the animal after infection showing their possible role as reservoirs and as rectors of parasite. In the present work, we aimed to detect prevalence of T. gondii infection among ewes to evaluate its possible role in transmission of infection to humans. We used modified agglutination test and ELISA test to detect anti toxoplasma antibodies in sera of sheep. Our study showed that 40 (20%) out of 200 sheep 33 of them are positive for anti toxoplasma antibodies by modified agglutination test and ELISA test and 7 are positive by ELISA only. Among seropositive sheep 14 (42.4%) out of 33 positive at a dilution of 1:25, 14 (42.4%) were positive at a dilution of 1:50, and only 5 (15.2%) were positive at a dilution of 1:500. These results indicate that sheep may play an important role in transmission of toxoplasmosis to human in Egypt.
ABSTRACT

Our study showed that 47 out of 200 chickens (23.5%) are positive for anti-Toxoplasma antibodies. The number of seropositive cases in farm-bred chickens was 19 out of 130 (14.6%), while the number was much higher in house-bred chickens, as 28 out of 70 (40%) of the sera examined were positive. Among farm-bred seropositive chickens, 8 (42.1%) out of 19 were positive at a dilution of 1:25, 9 (47.4%) were positive at a dilution of 1:50, and only 2 (10.5%) were positive at a dilution of 1:500. Among house-bred seropositive chickens, 5 (17.9%) out of 28 were positive at a dilution of 1:25, 16 (57.1%) were positive at a dilution of 1:50, and 7 (25%) were positive at a dilution of 1:500. These results indicate that chickens may play an important role in transmission of toxoplasmosis to humans in Egypt. It also indicates that farm-bred chickens are less likely to get infection than those which are house-bred. In experimental infection of pigeons with Rh-strain tachyzoites, it was found that pigeons are very susceptible to infection with T. gondii. Most of pigeons infected died of acute toxoplasmosis and those which resisted acute form retained the parasites in their internal.
ABSTRACT

Tuberculosis is the world’s main cause of infection disease related mortality. The incidence of new cases of tuberculosis has increased in the majority of countries, due primarily to its association with human immunodeficiency virus (HIV) epidemic, but also to other conditions, such as migration, homelessness, poverty, addictions or inadequacy of health care resources. There are a number of factors, environmental as well as constitutional, that alter individual response to tuberculous infection and favour the development of the disease.
The study was performed in Sallam village near Assiut City from March 1998 to August 2001. Active surveillance was performed using house to house survey and frequent visits to rural health unit to determine the causes of acute viral hepatitis in that village. Results:- AVH was diagnosed in 105 cases. Acute hepatitis A (AHA) was the most frequent causer of AVH (34 cases, 32.4%), followed by AHE (29 cases, 27.6%), AHB in (9 cases, 8.6%). Acute hepatitis C was diagnosed in only 3 cases (two of them mixed with AHE 1.9%), the cause of AVH unknown in 15.1% of cases.
Pseudomonas diminuta was isolated from iron based deposits (rust layer) on nutrient agar medium. For corrosion's determination of mild steel (MS) two different techniques were used for Electrochemical Impedance Spectroscopy[EIS] expressed by (impedance [\(z\), ohm], phase angle [degree]) and tafel polarization by using three test solutions (natural tape-water system [NTS], natural tape water containing iron-based deposits [NFS] and natural tape water containing \(P.\) diminuta and MS [NBS]). Parallel to the above experiment, Colony Forming Units [CFUs/ml] in absence or presence of MS was determined (0-10 days). The results of impedance showed a decrease followed by fixed values and a vice versa results were obtained in case of phase angles (\(^\circ\)) shift at high and low frequency respectively. Tafel polarization expressed by circuit potential (E) mV were reduced in the presence of bacteria compared to its absence) in anodic current density [\(\mu A/cm^2\)]. All data obtained were done after one and four days of incubation in the above three media, also CFU increased after one day in presence of MS. It can be concluded, that the above bacterial species contribute to the corrosion of MS.