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Compte-tenu de l'importance des testicules dans la vie reproductrice de I'animal et la rarete des etudes lesionnelles sur cet organe dans la leishmaniose canine, les auteurs montrent dans une etude histologique conduite sur 31 chiens leishmaniens que sur des testicules macroscopiquement apparemment sains, des lesions histologiques d'atrophie epitheliale et d' infiltration macrophagique et lymphoplasmocytaire apparaissent precocement dans la maladie. L'etude detaillee a permis d'identifier 4 stades lesionnels avec un gradient de gravite croissant allant de 1 a 4. Ces stades sont domines par des lesions atrophiques de Γ epithelium seminifere et epididymaire et un infiltrat interstitiel evoluant vers la sclerose. L'etude statistique a permis de montrer 1'absence d'une relation evidente entre les lesions testiculaires et la presence du parasite dans les cellules.

599. IMMUNOPROPHYLAXIS OF *Echinococcosis* IN UZBEKISTAN. M. Aminjanov, S. Aminjanov. *Uzbek Research Institute of Veterinary by acad. K.I. Skryabin, Samarkand, Uzbekistan.*

Echinococcosis as a most pathogenic, widely spread and causing a tremendous economical damage disease attracts attention scientists and veterinarians of all over the world, including Uzbekistan. Recently, invasions damaged not only the animal husbandry, but also the population. According to Razzakov and others (1986), during 1968-1983 in hospitals of Samarkand region more than 327 people were operated infested by echinococcosis. A large part from them were children up to 15 years. From total amount of children 6,5-12 years infested by parasites, 12% were infested by echinococcosis. Boimuratov H. during examination of 86 of children who had echinococcosis of liver in Samarkand Centre of Children Surgery revealed, that 24 were children from 1,8-7 years (27,9). 22 -were children from S to 10 year (25.6%) and 40 were children from 11 to 15 year (46,5%). According of doctor's information from Republic Center of Surgery by acad. Vachidov (Tashkent) every week in the Surgery of liver and gall-bladder 15-20 patients infested by echinococcosis were operated, From data presented it is clear, that the people infested by echinococcosis practically of any age, but the children arc more subjected to it, than grown-ups. Analogous of people infected is also marked in other republic of Central Asia. The children's infection in Kazakhstan is 11,4% from total quantity of infested people, On 100 thousand people of Kyrgyzstan registered 2-3 infested by echinococcosis, Marokko - 6,5%» Algeria - 3-4%, Tunisia -16,5%, Jordan - more than 15%, Kuwait - 36%- Echinococcosis is spread rather and influence on people's health .According of World Health Organization, the treatment of one man infested by echinococcosis due to disease duration (10-15 years) the society inflicted a loss of 10 thousands dollars USA (Sultankulov T. D., Omarov A. D, 1999), Echinococcosis beside the medical problem is a problem for veterinary science and practice. According our data the infection of cattle is - 26,34%, sheep - 41.85%, goats - 9,3% and camels - 21,46%. From every 100 head of infested by echinococcosis is a damage of 220 kg of meat, 50 kg of liver, 30 kg of lungs, 20 kg of wool and 7-12 lambs .According Irgashev I. and Mukhammadiev S. data (1996) the economical losses attributed to echinococcosis of all species of agricultural animals slaughtered in meal-packing plants of Uzbekistan total is 5 milliards of sums every year.Taking into consideration, the above mentioned, the working out of immunoprophylaxtics remains the problem question of veterinary-medical sciences .The suggested and introduced measures against echinococcosis have not provided the desired success in the struggle with this insidious diseasedn this connection, in the production and laboratory we have tested the vaccine for the prophylaxic of sheep echinococcosis.

600. PREVALENCE OF GASTROINTESTINAL HELMINTH PARASITES OF SHEEP AND GOATS IN NYALA, SOUTH DARFUR, SUDAN. A.E. Bashar, A.D. Abakar, A.A. Ismail. *Sudan.*

The prevalence of gastrointestinal parasites of sheep and goat in Nyala with respect to age, sex and season was studied by coprological and postmortem examination. Out of 588 samples from sheep and 262 from goats examined, 67%and 70%. Respectively were found to be infected with the parasites. The overall prevalence was around 68%. However, infection was observed to be inversely proportional with age. Sex has no effect in the prevalence of the parasites. Flunctuations in environmental temperature did for we spread of the parasites. The following parasites were indentifie :Haemochus conotus. Trichostrongylus axei, Oesophagsotomum sp; Strongyloides papillosus, Cooperia sp.. Trichuris sp.. Fasciola gigantica and Monesia expansa.

601. COMBATING ANTHELMINTIC RESISTANCE USING HOLISTIC AND INTEGRATED PARASITE MANAGEMENT PRACTICES. G.F.Bath. *Faculty of Veterinary Science University of Pretoria South Africa.*

This paper briefly describes and evaluates current practical measures to reduce the escalation in anthelmintic resistance in helminths of domestic livestock, particularly in sheep and goats. Basic management requirements comprise the separation of groups of animals and identifying those most at risk. Separate paddocks are essential to allow for the resting of pastures and alternation of grazing with other species. Water leaks have to be mended, grass removed from pens and groups must be moved strategically when required. At present, selection of animals consists of only the use of the faecal egg count (FEC) and FAMACHA® system or anaemia index. Monitoring of groups requires planned FEC and FEC reduction tests as well as FAMACHA evaluations in the case of haemonchosis. Proper planning demands the use of experts and basic but flexible programmes based on strategic considerations. Optimising the use of anthelmintics requires that the relative importance of parasites is established, so that the most suitable drug can be used at the lowest possible level and frequency. A major new principle is that only those animals requiring treatment should be drenched, and if all animals are to be treated, the animals must not be moved immediately to new pasture. The efficacy of the drug used can be enhanced by correct administration, governing feed intake, either repeating or increasing the dose, ensuring correct dosage, and using combinations or sustained delivery systems with caution. Promising future approaches include the use of predacious fungi, dilution of resistance by the introduction of susceptible strains of worms, vaccination, protein supplementation and monitoring by condition scoring. To be successful, all these principles should be integrated into a holistic system of parasite management.

602. EXPLORATION DE LA DYNAMIQUE DE LA TRANSMISSION DE LA LEISHMANIOSE CANINE AU SEIN D'UNE POPULATION DE CHIENS PRECIEUX D'UTILITE PUBLIQUE. K. Bedoui[1], R. Ben Ismail[2], F. Kechrid[3], M. Zbiba[1],. *'DSS Ministere de I'Interieur,[2] Institut Pasteur de Tunis,[3] Conseil National de I'Ordre des Medecins Veterinaires de Tunisie.*

La leishmaniose canine est une maladie qui sevit de facon endemique dans les chenils etudies. Le travail presente est fonde sur 1'observation de 124 chiens vivants dans cinq endroits differents, ainsi que la