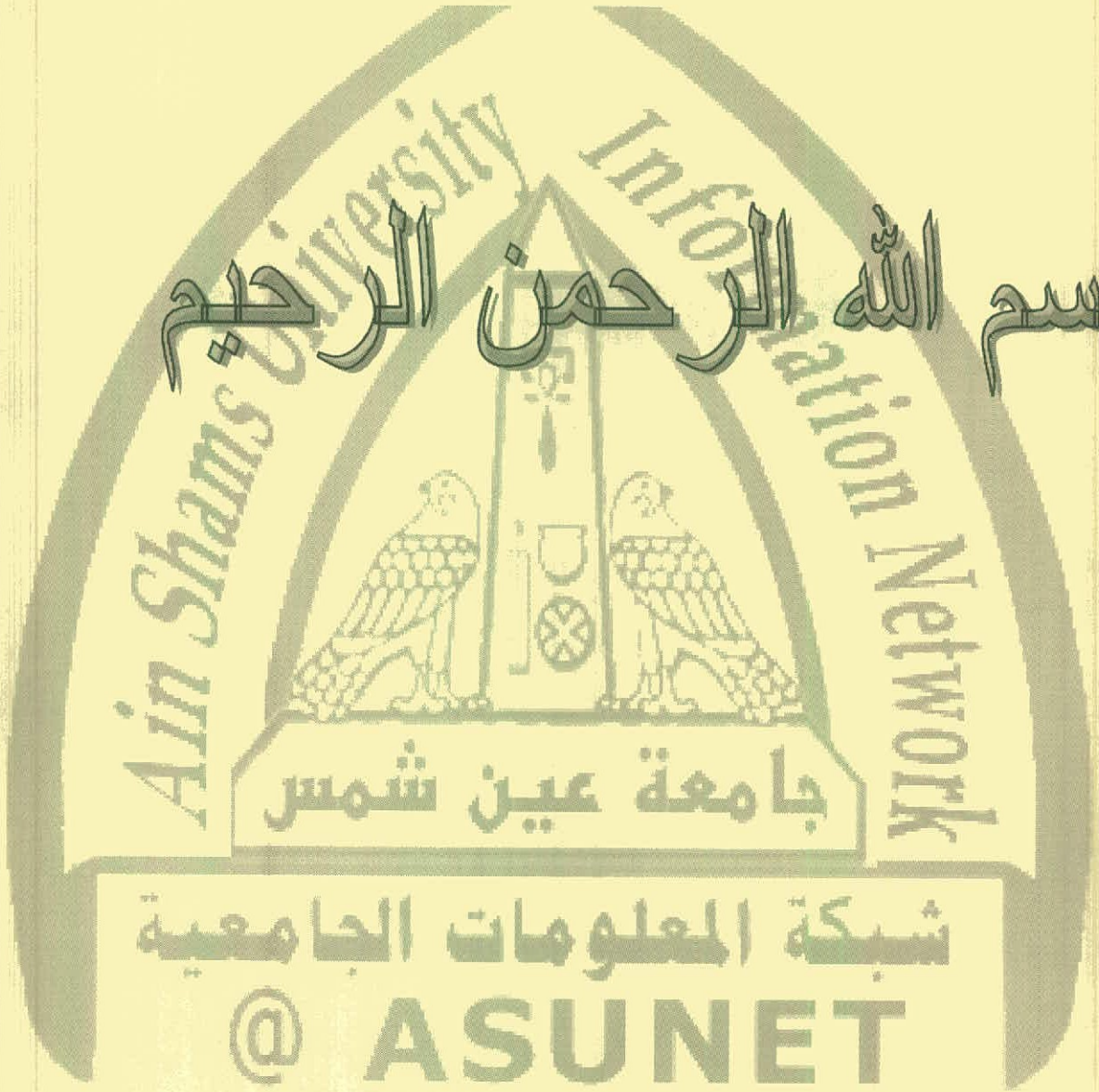
شبكة المعلومات الجامعية



بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

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في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

Pathological Studies On The Effect Of Ivomec On The Urogenital System Of Rabbits

Thesis presented

By

Hassan Hussein Shehata

(B.V.Sc., Assiut Univ., 1972)

For The degree of M.V.Sc.

(Pathology)

To

Department of Pathology and Parasitology

Faculty of veterinary Medicine

Alexandria University

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Under Supervision of

Prof. Dr. Mostafa Mansour Abd-El-Rahman

Prof. of Pathology,

Head of Pathology and Parasitology Dept.

Fac. Vet. Med.,

Alexandria University

Prof. Dr. Mohamed Yousry El- Sokkary

Prof. of Parasitiology

Dept. of Pathology and Parasitology

Fac. Vet. Med.,

Alexandria University

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REVIEW OF LITERATURE

REVIEW OF LITERATURE

Leaning (1981) recorded occassional occurrence of necrotic changes and abscesses at the site of injection of ivermectin in stallions.

Dini et al. (1984) found that subcutaneous injection of ivermectin at 1 mg/kg body weight, was therapeutically successfull against sarcoptic mange (caused by sarcoptes scabie "form cuniculi") in naturally infected rabbits within 1-3 weeks.

Restani et al. (1984) have treated the ear mange (Psoroptes cuniculi infectation) in naturally as well as experimentally infected rabbits with ivermectin. The authors found that the ear mange had responded to subcutaneous injection of ivermectin at 200 µg/kg B.W. dose level.

Romero et al. (1984) studied the therapeutic effect of administration of ivermectin subcutaenuly to 112 rabbits with psoroptic and/or sarcoptic mange at 250-1200 µg/kg B.W. once or repeated up to 7 days. All rabbits given two doses were cured. The authors concluded that two doses of 250 µg/kg B.W. are recommended for therapeutic purposes.

El-Sadek et al. (1985) evaluated some of the pharmacological as well as toxicological properties of ivermectin in rat, guinea pig and rabbit. They concluded that ivermectin possessed involves an anti-inflammatory activity besides local anaesthetic effect when applied by infiltration. Also

it was proved that it has no surface corneal anaethetic efficacy. On regard to the effect of ivermectin on the isolated ileum guinea pig, rabbit dudenum and uterus of rat, there was a slight dose dependent inhibitory effect on the motility which proved to be of ganglionic blocking activity. On regard to the signs of toxicity in rats due to chronic administration of invermectin (200 μg/kg B.W. for 15 days), there were rapid shallow respiration with loss of appetite, body weight and activity. Upon postmortem examination there was only congestion of liver, heart, kidneys, spleen, testes and ovaries. Histopathologically, there were a general engorgement of capillaries besides prominent perivescular edema, In addition, an associating numerous mast cells were seen in the periovarian tissue and to a lower extent in the testicular interstitial tissue.

Prosl and Kanout (1985) have treated rabbits naturally infected with psoroptes cuniculi, with a single subcutaneous injection of 0.2 or 0.4 mg ivermectin per kg. body weight. This treatment resulted in a clinical cure but the mites were not completely eliminated. The authors mentioned that the recommended treatment was two injections at 0.4 mg/kg B.W.

Ashmawy and Fahmy (1987) have treated infested rabbits with mixed psoroptic and sarcoptic mange by a subcutaneous dose of ivermectin, similar to that used for large animals (1 ml/50 kg body weight). Depending on the severity of the mange, the authors found that the clinical response was observed after 8-17 days al though complete disappearance

of all stages of the mites was seen after 10 days from the begenning of the treatment.

Chiu et al (1987) studied the effect of administration of ivermectin in a single dose of 0.3 or 0.4 mg/kg B.W. by either the subcutaneous (steers and pigs) or oral rout (sheep and rats). Animals were killed over a period of 1 to 28 days after dosing. The depletion rates of the total liver residue were 1.2 days for sheep, 4.8 days for steers and 5.2 days for pigs. The original drug was the major liver metabolite in all species studied. These metabolites were also identified as the major metabolites by liver microsomes of the same species, indicating correlation between in vivo and in vitro metabolism of the drug.

Sevcikova et al. (1987) evaluatedthe efficacy of 1% ivermectin preparation which was produced under licence in Czechoslovakia. The results of their studies confirmied the high efficacy of ivermectin against ecto-and endoparasites in various animal species including cattle, horses, sheep, pigs, dogs, cats, rabbits, foxes, zoo animals and deer.

Ali and Abu-Samra (1988) injected ivermectin subcutaneously in Nubian goats, at the recommended therapeutic dose of 0.2 and 1 mg/kg B.W. and also at 1 or 5 mg/kg B.W. They found that at 0.2 1 mg/kg B.W. no obvious clinical signs hematological, biochemical or pathological changes were observed, except for transient signs of pain at the site of injection. At 5 mg/kg B.W., signs of toxicity were seen few minutes after

treatment. These signs were mainly nervous in nature and included irritability, rotation of the head sideways, muscle spasms, tail wagging, salivation, excessive vocalization, moaning, recumbancy and finally death. One goat died five minutes after treatment, while the other three died 3-4 days after. These animals had lower hearts beat and respiratory rates than normal, also they were anorectic and became anemic. On postmortem examination there were hemorrhages and congestion of lungs and liver. No major histopathological changes were observed, except in the liver, where there was multiple focal non-suppurative necrotizing hepatitis.

Arlian et al. (1988) studied the energy relationship between the host and the ectoparasitic mite sarcoptes scabiei var. canis (S. Scabiei). Parasitized rabbits during the first 14 week after initial infestation gained weight at about the same rate, but they consumed more food and water than noninfested rabbits. During 17-42 weeks after initial infestation, infestation levels increased until 10-30% of the body area was heavily parasitism. During this time, infested rabbits steadily lost weight even though there was no marked difference in food consumption between infested and noninfested rabbits. Oxygen consumption rates were 0.00206 and 0.00076 µl oxygen h-1 per mite for female and male mites, respectively, at 75% RH and 34 °C. Based on these rates (mite density on the host, and the infested host body surface area) the energy demand by the mites on a heavily parasitized, host was insignificant relative to the metabolic rate of the host. Parasite energy demand was not responsible for the weight loss or reduced weight gains exhibited by the parasitized hosts.