

Treatment of mange in buffaloes with Abamectin

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SUMMARY

Abamectin activity against mange in buffaloes was evaluated by using 0.2 mg/kg. B. W. of this drug as a single subcutaneous injection for treatment of 50 naturally affected buffaloes with Sarcoptic mange. There were no mites in the skin scraping of treated animals two weeks after treatment , new hair growth appeared in the infected areas four weeks after treatment , along with healing of the skin lesions.

INTRODUCTION

Mange in buffaloes had been reported in many countries including Iraq (1, 4). *Sarcoptes* sp. was described as a causative agent of mange in buffaloes in Iraq (2). The lesions of Sarcoptic mange spread widely in different parts of the body and cause loss of hair, presence of scales and crusts on the skin , thickening of skin, itching, restlessness, and in advanced cases emaciation and general weakness (9, 8). Several drugs had been used for treatment of mange in buffaloes such as Acaricides , and Ivermectin (4,6,8). Abamectin is a new chemically modified compound of macrocyclic lacton derivative Avermectines, are a long acting drug . Single dose of Abamectin was found to be effective in treatment of sarcoptic mange in camels (7). In this study Abamectin was used for treatment of Sarcoptic mange in buffaloes.

NATERIALS & METHODS

Naturally affected and clinically diagnosed buffaloes with mange were treated with Abamectin (GENESIS™ LA) * at a dose rate of 0.2 mg/kg. B. W. by a single subcutaneous injection. The treated group included 43 buffalo calves, three to six months old (20 females, & 23 males) , and 7 female buffaloes , one to three years old. The control group included 7 buffalo calves three to six months old (3 females & 4 males) naturally affected with mange and in the same farms in Futhalia village near Baghdad. Mange was confirmed by laboratory examination of the skin scraping for the presence of Sarcoptes sp. (5) . Efficacy of treatment with Abamectin was evaluted by clinical examination and laboratory detection of mites in the skin scraping which had been taken weekly throughout the study.

GINESIS™ LA : Ancare New Zealand Ltd. 48 Diana Drive, Glenfield, Aukland.

RESULTS

The treated buffalo calves and female buffaloes showed decreased itching one week after treatment with Abamectin. The scales and crusts disappeared , and no mites were detected in the skin scraping of all treated animals two weeks after treatment. New hair growth appeared and healing of the skin lesions occured four weeks after treatment. There were no side effects locally at the site of injection neither systemic effects were detected clinically after treatment. The control group of the naturally affected buffalo calves had progressive skin lesions and mites of Sarcoptes sp. were detected in skin scraping which were taken throughout the study.

DISCUSSION

Topical application of Acaricides for treatment of mange had limited success and are time consuming, needs intensive labour and could be dangerous for animals and human beings (4,8). While in using Ivermectin one to two doses were enough to cure clinical cases of sarcoptic mange in buffaloes , and mites were not detected in skin seraping after 20 days of treatment (1, 3) . Abamectin in single dose was offective in treatment of sarcoptic mange in camels (7). In this study Abamectin (0.2mg/kg. B. W.) was effective in treating naturally affected buffalo calves and adult buffaloes with sarcoptic mange after one subcutaneous injection as evaluted by clinical improvement, and mites were not detected in the skin scraping two weeks after treatment, besides healing of the skin lesions. While in the control group of naturally affected buffalo calves with sarcoptic mange, and in the same farms there was persistence of the clinical signs, restless, itching, loss of hair, presence of scales and crusts on the skin , and thickening of the skin, and by Laboratory detection of mites in the skin scraping which had been taken weekly throughout the study. Also it is safe drug as no local or systemic effects could be detected after treatment with Abamectin.

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علاج الجرب في الجاموس بعقار الابمكتين

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الخلاصة

تم تقييم فعالية عقار الابمكتين بجرعة 0,2 / كغم من وزن الجسم في علاج الجرب في الجاموس بإعطائه حقناً لمرة واحدة تحت الجلد إلى 50 حالة خمج طبيعي بالجرب اختفت حلم الجرب من القشطات الجلدية بعد أسبوعين من العلاج وظهر شعر جديد في المناطق المصابة وشفيت الآفات الجلدية بعد أربعة أسابيع من العلاج .