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SHORT COMMUNICATION

TREATMENT OF CNEMIDOCOPTES MANGE IN A GROUP OF BUDGERIGARS (*MELOPSITTACUS UNDULATUS*)

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SUMMARY

A group of budgerigars (*Melopsittacus undulatus*) with crusty lesions on their legs and beaks and with signs of pruritus were found infested with *Cnemidocoptes pilae*. Ivermectin at a dose of 0.2 mg/kg body weight and 5% cabaryl powder were used to treat the birds . In this case, both Ivermectin and Cabaryl were found to be effective in the treatment of the infestation.

Keywords: Budgerigar, *Cnemidocoptes pilae*, Ivermectin, Cabaryl

Various species of mites have been reported in psittacine birds. The most important and frequently diagnosed mite is *Cnemidocoptes pilae* (family Sarcoptidae) which causes prominent and disfiguring lesions (Greiner and Ritchie, 1994). In budgerigars, the disease is commonly known as scaly leg and scaly face, while in canaries, it is known as tassle foot (Willard, 1995).

Lesions are produced on unfeathered portions of the leg, and on the beak. Tunnels are bored into the epithelium by the mites, as they feed on tissue fluids, creating a characteristic honey-combed appearance and accumulation of exudate and skin debris which results in the formation of scales and crusts (Arends, 1991; Greiner and Ritchie, 1994). This paper reports the treatment of *Cnemidocoptic* mange in a group of budgerigars (*Melopsittacus undulatus*) at Kuala Lumpur Bird Park.

A group of 36 budgerigars were donated to Kuala Lumpur Bird Park by an individual. The birds were of mix species, age and sex. All birds were kept in one big cage approximately 2.5 x 2.0 x 2.0 m. The bird keeper complained that most of the budgerigars were always pecking their feathers and skins. They appeared restless and their beaks were deformed.

Physical examination revealed signs of discomfort and itchiness. The birds were scratching their body using their beaks and feet. Out of 36 birds, five had severe whitish crumb like deposit around the cere and commissures of the beak. The shanks and digits of both legs appeared dry, roughened and fissured. The beaks appeared crusty, scaly and deformed (Plate 1). Other birds had similar but less severe lesions.

Diagnosis of *Cnemidocoptes* mites was confirmed by examining skin scrapings from the legs, feet, beak and cere.

Two types of drugs, Ivermectin (Ivomec, MSD) birds. Ivermectin was used to treat five severely affected birds with a dose of 0.2 mg/kg body weight. Three different routes were used; one bird was given intramuscularly, two birds by topical application and the remaining two birds were given orally. The treatments were repeated two weeks later.

The less severely affected birds were treated with 5% cabaryl powder. Before applying the powder to the cere, beak and legs, liquid paraffin was applied onto the affected areas. Cabaryl powder was also applied on the dorsal part of the body and underneath the wings. The same treatment was repeated after 14 days.

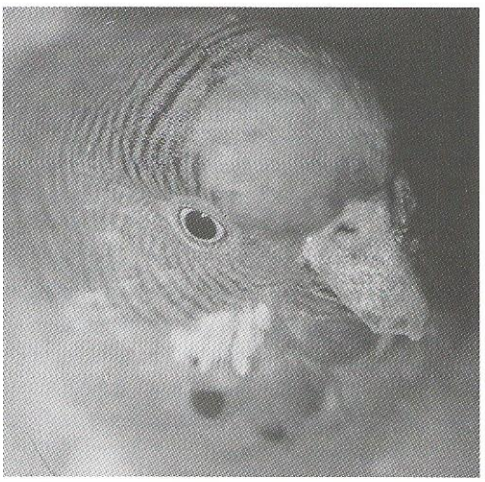

Plate 1: A bird with crusty, scaly and deformed beak.

Cnemidocoptes mange rarely cause death if the lesion is not severe. However, the lesions result in deformity and cause discomfort to the birds. In severe cases, deformed beaks may lead to death due to starvation, because the birds are unable to consume

In this case, the sick birds showed improvement with either 5% cabaryl powder or ivermectin treatments. The improvement was observed within a week of treatment, except for one severely affected bird which died a day after treatment with ivermectin intramuscularly. This bird was later confirmed to be infected with *Pseudomonas aeruginosa* (S. Jasni, pers. comm.). The birds that survived showed less scratching behaviour a few days after treatment and fully recovered one month later.

Ivermectin is the treatment of choice for *Cnemidocoptes* mites, at a recommended dosage of 0.2 0.3 mg/kg body weight, given orally, topically or intramuscularly (Willard, 1995). In the study by Shane *et al.* (1985) the use of cabaryl caused regression of the lesion in the palm cockatoo. Other types of treatment such as the use of mineral oil to soften the lesions, in combination with a topical acaricide containing benzyl benzoate, orthophenylphenol or crotamiton have also been reported to be successful (Arnall and Keymer, 1975; Barnes, 1986). Repeat treatments after 10-14 days are necessary because these mites complete their life cycle within approximately 3 weeks (Milan, 1987). Therefore both ivermectin or 5% cabaryl powder are recommended for treating *Cnemidocoptes* mites. Depending on the availability, cost, ease of administration of the drug and the stages of infection, the veterinarian can decide on the choice of the drug to be used.

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RINGKASAN

RAWATAN KURAP CNEMIDOCOPTES DALAM SEKUMPULAN BUDGERIGAR (MELOPSITTACUS UNDULATUS)

Sekumpulan budgerigar (Melopsittacus undulatus) *berlesi berkeruping pada kaki dan paruh berserta diiringi petanda pruritus telah diserangi* Cnemidocoptes pilae. *Ivermectin pada dos 0.2 mg/kg berat badan dan 5% serbuk kabaril telah diguna untuk merawat burung tersebut. Dalam kes ini, keduanya Ivermectin dan kabaril telah berkesan dalam rawatan serangan tungau.*