DEMODICOSIS IN GOLDEN HAMSTER
(Mesocricetus auratus) - FIRST CASE IN BRAZIL
(DEMODICIOSE EM GOLDEN HAMSTER (Mesocricetus auratus) - PRIMO RELATO NO BRASIL)

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SUMMARY

A one year and six month old, male Golden hamster (Mesocricetus auratus) was presented with moderate alopecia, pruritus and erythema. Physical examination revealed scaling, crusts, erythema and focal alopecia on dorsal region, pelvic limbs and face. There are no alterations in physical condition. Scrapping revealed mites identified as Demodex aurati. Combined therapy with 1% selenium sulfide shampoo and topical application of 2500 ppm amitraz once a week for six weeks was used. Complete cure was observed after four weeks.


RESUMO

Descreve-se um caso de um Golden hamster com 1 ano e 6 meses de idade apresentando alopecia moderada, prurido e eritema. O exame dermatológico revelou escamas, crostas, eritema e alopecia na região dorsal, dos membros pélvicos e face. O animal não apresentava outras alterações ao exame físico. Os raspados de pele revelaram a presença de Demodex aurati. A terapia consistiu de banhos com xampu de sulfeto de selênio a 1% e aplicação tópica de amitraz 2500 ppm, uma vez por semana. A cura completa foi observada após quatro semanas de tratamento.


INTRODUCTION

Demodicosis in Golden and Syrian hamster is caused by Demodex aurati and Demodex criceti (Owen & Young, 1973; Murphy et al 1984; Sarashina & Sato, 1986; Hasegawa, 1994). Demodex mites have been found in many species, such as human, horse, cattle, dog, cat, mouse and rat. These parasites have also been found in many hamster’s species (Owen & Young, 1973; Murphy et al, 1984; Sarashina & Sato, 1986; Hasegawa, 1994; Hurley & Desch, 1994).

The predisposing factors to the development of hamster demodicetic mange have been suggested to include sex and vitamin deficiency (Nutting, 1961), stress (Estes et al 1971) and age (Sarashina & Sato, 1986). Demodex aurati and D. criceti are low grade pathogens (Hasegawa, 1994).

The infestation by D. aurati results in dry skin, scaly, alopecia and pruritus (Sarashina & Sato, 1986; Hasegawa, 1994). Demodicosis by D.aurati is associated with immune disorder related to neoplasia or poor nutrition (Scott et al, 1996), but it can also be found in many clinically normal patients (Murphy et al, 1984).

D. aurati, which is found in hair follicles, is a long, slender mite. D. criceti is morphologically shorter and broader, presenting in the epidermis (Owen & Young, 1973; Sarashina & Sato, 1986; Hasegawa, 1994).
Information available in the management of rodent demodicosis is sparse (Hasegawa, 1994). Schawarbrott et al (1974) described that selenium sulfide shampoo was a useful treatment for demodicosis in hamster. Others authors recommend topical treatment with 0.013% amitraz (Hasegawa, 1994) or 2500 ppm (Scott et al, 1996) by topical use. Hasegawa (1994) combined therapy using amitraz and selenium sulfide shampoo, but it did not result in a complete cure of the alopecia associated with demodicosis. Selenium sulfide shampoo is an useful ancillary therapy in the management of rodent demodicosis, allowing reduction of the miticidal topical drugs.

Case Report

A one year and six month old, male Golden hamster of 0.17 kg was presented to Dermatology Service of the Veterinary Hospital from FMVZ - UNESP with moderate alopecia, pruritus and erythema on dorsal region these symptoms started at one week.

Physical examination revealed scalying, crusts, erythema and alopecia on dorsum (Fig. 1), pelvic limbs (Fig. 2) and face. The physical condition was normal. Scrappings (four) obtained from skin lesion were cleared by 10% KOH solution and revealed a large number of all developmental stages of *Demodex aurati* (long and slender).

Clinical treatment consisted combined use of 1% selenium sulfide shampoo and topical application of 2500 ppm amitraz. Selenium shampoo was performed fifteen minutes before the use of amitraz. Prescription therapy was accomplished once a week for six weeks. The skin lesions were completely cured and negative scrappings were obtained after four weeks.

DISCUSSION

Demodicosis is a common parasitosis in old hamster (Nutting, 1961; Scott et al, 1996). *D. aurati* is found in hair follicles (Owen & Young, 1973; Sarashina & Sato, 1986: Hasegawa, 1994). Demodicosis clinics by *D. aurati* is associated with immune deficiency (Scott et al, 1996). The good general condition of the hamster indicated the absence of sistemic disease and it probably responsible for the fast recovery of the animal. Although, blood, serum and urine were not collected to diagnostic investigation.

The skin lesions in this case resemble those reported by Nutting, 1961; Sarashina & Sato, 1986; Hasegawa, 1994 and Scott et al, 1996.

Scrappings obtained from skin lesion and cleared by 10% KOH solution revealed *D. aurati* (Long and slender) and this is the best diagnostic of method for parasitic diseases (Scott et al, 1996).

Although the number of roedent pets is increasing annually in the cities, there is no control studies on management of rodent demodicosis. Treatment consists of amitraz and selenium sulfide shampoo isolated or co-
bined (Schawarbrott et al, 1974; Hasegawa, 1994; Scott et al, 1996). The experience is this case combined therapy using amitraz and selenium sulfide shampoo, resulting in a complete cure of the skin lesions associated with demodicosis.


