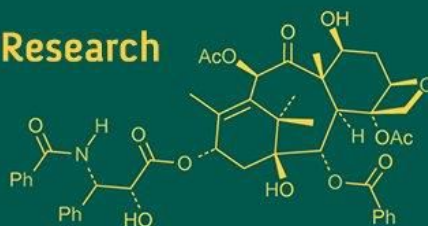
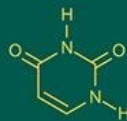


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Diagnostic and therapeutic management of notoedric mange in persian cats: A report of three cases

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Abstract

Three cats were presented to Peripheral hospital APMC-Veterinary College Bidar with the history of itching, hair loss and redness of skin at facial region and ears, upon clinical evaluation it was revealed that crusty alopetic patches on the margins of ears, face and neck region and skin scrapping examination found mites with round body, shorter legs, long unjointed stalk and confirmed the presence of notoedric mange. The affected cats were administered with Inj Ivermectin for successful recovery @ 0.2 mg/kg B. wt, weekly once by subcutaneous route along with supportive therapy for consecutive four weeks.

Keywords: Skin scrapping, mites, mange and ivermectin

Introduction

Notoedres and Sarcoptes species belongs to family sarcoptidae and their borrowing property lead to intense pruritus of skin causing scabies in dogs, cats and humans (Hardy *et al.*, 2012) [3]. Feline scabies is caused by *Notoedres cati* which is contagious and mostly spreads through the contact with infected bedding or direct contact with infected animals (Friberg, 2006) [1]. The affected cats exhibited various clinical signs viz., intense pruritus, non-papular erythematic rashes on skin, hyperkeratotic and skin peeling lesions on face, ears, and extending to neck, limbs and other parts of the body (Ozukum *et al.*, 2019) [5]. Notoedres mange is highly contagious parasitic skin disease; it is of zoonotic importance causing intense itching in humans and skin lesions were observed on hand, legs and the areas of skin which come in contact with the affected pets (Galdhar *et al.*, 2020) [2]. Based on observation of clinical signs and skin scrapping examination, the scabies can be diagnosed (Kumar *et al.*, 2023) [4]. This documentation describes the diagnostic and therapeutic management of notoedric mange in Persian cats.

Case Report

Three cats housed at same place belonging to same owner were presented to Peripheral hospital APMC-Veterinary College Bidar (Karnataka, India) with history of itching, hair loss and redness of skin. Upon clinical examination rectal temperature of cats were 101.7°F, 102.1°F and 102.4°F, with crusty alopetic patches on the margins of ears, face and neck region (Fig. 01). Both superficial and deep skin scrapings were collected in a test-tube and digested in 10 % of KOH solution and examined under microscope at 10X magnification. The presence of short legs with long unjointed stalk along with short suckers and anus observed on dorsal aspect of round body mites confirms the diagnosis of notoedric mange (Fig. 02). The cats were administered with Inj. Ivermectin @ 0.2 mg/kg b.wt., via subcutaneous route, chlorpheniramine maleate @ 2 mg/kg b.wt, oral supplementation of omega-6 and omega-3 aminoacids (Nutricat advance® 2.5 mL BID), Ivermectin was repeated at weekly intervals for 4 weeks and it was found that all the cats recovered successfully (Fig. 03, 04).

Discussion

Notoedric mange in cats can be managed by administration of ivermectin @ 0.2 mg/kg B.wt via subcutaneous route for 4 weeks which acts by enhancing GABA receptor neurotransmission at two or more sites by hyperpolarising interneuronal stimulation of

excitatory motor neurons, leading to flaccid paralysis (Sivajyoti *et al.*, 2013) ^[7] along with supportive treatment like oral supplementation of omega-6 and omega-3 aminoacids.



Fig 1: Allopetic lesions on face and ears.



Fig 2: *Notoedres cati* mite

Conclusion

Notoedric mange is a highly contagious parasitic skin disease that affects cats, with zoonotic potential causing pruritus and lesions in humans. The condition is characterized by intense itching, hair loss, and the formation of crusty lesions, particularly on the face, ears, and neck. Diagnosis is confirmed through skin scraping and microscopic examination. Effective therapeutic management involves the administration of ivermectin subcutaneously for four weeks, along with supportive treatment like omega-6 and omega-3 supplementation. This treatment regimen successfully resolves the clinical signs and leads to recovery, as demonstrated in the present case.

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