

# ***MICROSPORUM CANIS* INFECTION IN A KITTEN**

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## **ABSTRACT**

A female kitten aged one month was presented to the University Veterinary Hospital, Kokkalai with alopecia on face, neck and thigh and scaly lesions on the ventral abdomen. On examination of skin scrapings, no fungal spores or mites could be detected. Skin swab collected aseptically from areas with lesions was submitted to the Department of Veterinary Microbiology, College of Veterinary and Animal Sciences, Mannuthy for detailed investigation. The swab was inoculated on to Brain Heart Infusion Agar (BHIA) and Sabouraud's Dextrose Agar (SDA) for isolation of bacteria and fungus, respectively. It was identified as *Microsporum canis* based on macroscopic and microscopic morphology.

**Keywords:** *Microsporum canis*, lactophenol cotton blue staining

## **INTRODUCTION**

Dermatophytosis or ringworm is a common fungal infection of superficial layers of skin, hair and nails worldwide (Wu *et al.*, 2009). It is caused by dermatophytes belonging to the genera *Microsporum*, *Trichophyton* and *Epidermophyton* of the class *Ascomycetes*. Among animals, *Microsporum* sp. and *Trichophyton* sp. are

commonly detected in dogs, but is rather difficult to diagnose in cats as the infection in cats is mostly mild. Lesion observed mainly is alopecia and it might be due to spore infecting the hair shaft leading to increase in fragility of the hair. Cigar ash scaling in the depth of the skin coat might be visible (Muller *et al.*, 1989). In cats, the predominant organism indicated in dermatophytosis is *Microsporum canis*. The lesions are mainly seen on the head, chest, forelegs and along the ridge of the back.

## **MATERIALS AND METHODS**

The swab collected from the lesion was cultured on BHIA and SDA. The BHIA plate was incubated at 37°C for 48 h to check for any bacterial growth. The inoculated SDA plates in duplicate were incubated at 37°C and at room temperature for fungal isolation (Quinn *et al.*, 1994).

## **RESULTS AND DISCUSSION**

No bacterial growth could be observed on BHIA even after 48 h of incubation at 37°C. On SDA kept at room temperature, colonies with white surface and a silky center surrounded by bright yellow periphery could be detected after 5 to 7 days of incubation. The plates incubated at 37°C

did not reveal any growth even after seven days of incubation. These findings are in agreement with Markey *et al.* (2013).

On lactophenol cotton blue staining, long septate hyphae with spindle shaped and thick-walled macroconidia having approximately six compartments could be observed. Based on macroscopic and microscopic morphological characterisation, the fungal isolate was identified as *Microsporum canis* as per Quinn *et al.* (1994).

#### SUMMARY

The present communication deals with the isolation and identification of *Microsporum canis* infection in a cat. Being a zoonotic skin disease which is contagious in nature, it could be a risk factor to the cat owners. So, its timely diagnosis is important to give an effective treatment.

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