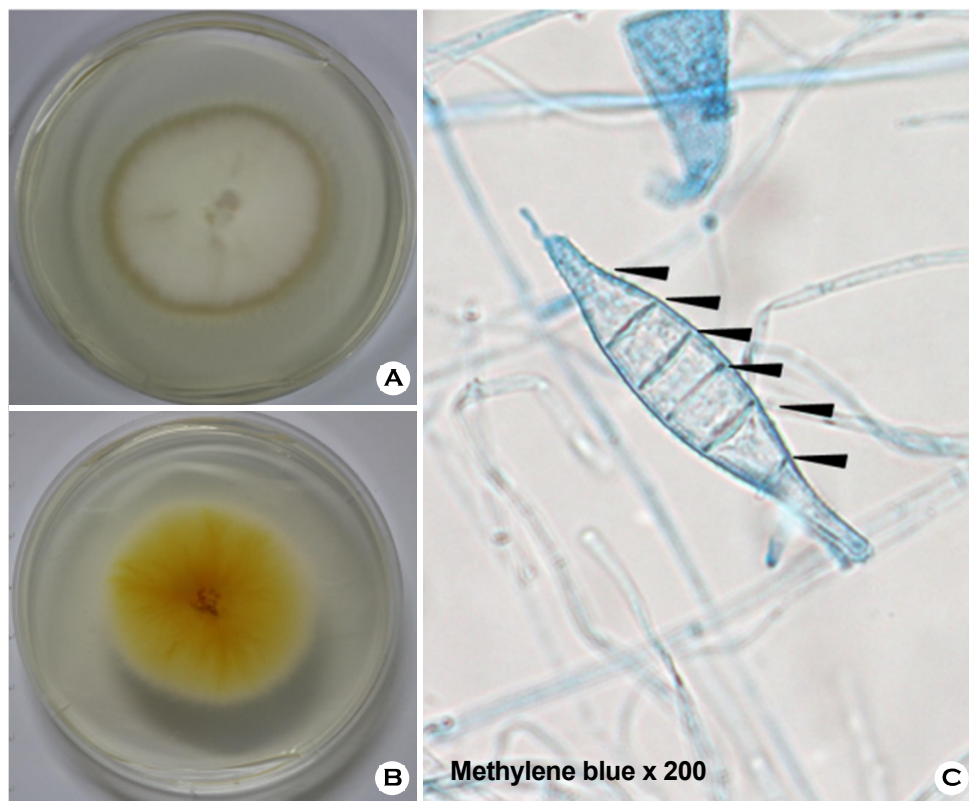


## Microscopic Findings of Macroconidia in *Microsporum canis*

Yong Woo Choi<sup>1</sup>, Osung Kwon<sup>1</sup>, Joonsoo Park<sup>1†</sup> and Yong Joon Bang<sup>2</sup>

Department of Dermatology, School of Medicine, Catholic University of Daegu,  
Daegu, Korea<sup>1</sup>

Catholic Skin Clinic, Medical Mycology, Daegu, Korea<sup>2</sup>



**Fig. 1. A, B, C. A,** White colored coarsely fluffy spreading colony with distinctive feathery texture was seen on Sabouraud's dextrose agar after 5 days on 25 °C **B,** From below, characteristic pale tan to yellowish colored stellated shaped colony **C,** Barrel-shaped, rough macroconidia have pointed ends which turn slightly to one side at the tip and have 6 cells (black arrow heads). (Methylene blue ×200)

Received: April 29, 2017, Revised: June 2, 2017, Accepted: June 13, 2017

†Corresponding author: Joonsoo Park, Department of Dermatology, School of Medicine, Catholic University Hospital of Daegu, 17-1, Duryugongwon-ro, Nam-gu, Daegu, 42472, Korea.

Tel: +82-10-6802-1023, Fax: +82-53-650-4891, e-mail: magincia@cu.ac.kr

Copyright © 2017 by The Korean Society for Medical Mycology (pISSN:1226-4709, eISSN:2465-8278). All rights reserved.

© This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. <http://www.ksmm.org>

*Microsporium canis* is a part of family of fungi known as dermatophytes<sup>1</sup>. It can cause a scaly, crusted rash that may appear as round, erythematous patches on the skin<sup>1</sup>. Other symptoms and signs include hairless patch, scaling on the scalp, itching and blister-like lesion<sup>1</sup>. The natural reservoir of *Microsporium canis* is in cats and dogs<sup>1</sup>. It can also be transmitted to humans through direct and indirect contact with animals and fomites such as combs, brushes, hats, furniture, and linens etc<sup>1</sup>.

In macroscopic morphology, *Microsporium canis* forms a white or yellowish, coarsely fluffy spreading colony with a distinctive hairy or feathery texture<sup>2,3</sup> (Fig. 1A). The reverse may characteristic pale tan to yellowish color which tends to turn brownish as it grows<sup>2,3</sup> (Fig. 1B). In microscopic morphology *Microsporium canis* septate hyphae which club shaped macroconidia may be found<sup>2,4</sup> (Fig. 1C). Macroconidia have relatively thick, coarsely roughened wall with knob-like end and contain internal cells divided into more than 6 compartments separated by broad cross-walls<sup>2,4</sup>. When we differentiate from other species of dermatophytes,

consideration should be given to the characteristic macroscopic and microscopic findings of *Microsporium canis*.

[Korean J Med Mycol 2017; 22(2): 84-85]

**Key Words:** Dermatophytes, Macroconidia, *Microsporium canis*

#### **Conflict of interest**

In relation to this article, I declare that there is no conflict of interest.

#### **REFERENCES**

1. Weitsman I, Summerbell RC. The dermatophytes. Clin Microbiol Rev 1995;8:240-259
2. Cabañes FJ. Dermatophytes in domestic animals. Biology of dermatophytes and other keratinophilic fungi. Revista Iberoamericana de Micología, chapter 13. Bilbao, 2000:104-108
3. Bodin E. Les champignons parasites de l'homme (in French). Paris, France: Masson et Cie:137
4. Nenoff P, Krüger C, Ginter-Hanselmayer G, Tietz HJ. Dermatophytes: Causative agents, epidemiology and pathogenesis, Mycology, 2014;12:188-209