

Fungus Culture: Example of a Contaminated Fungus Culture

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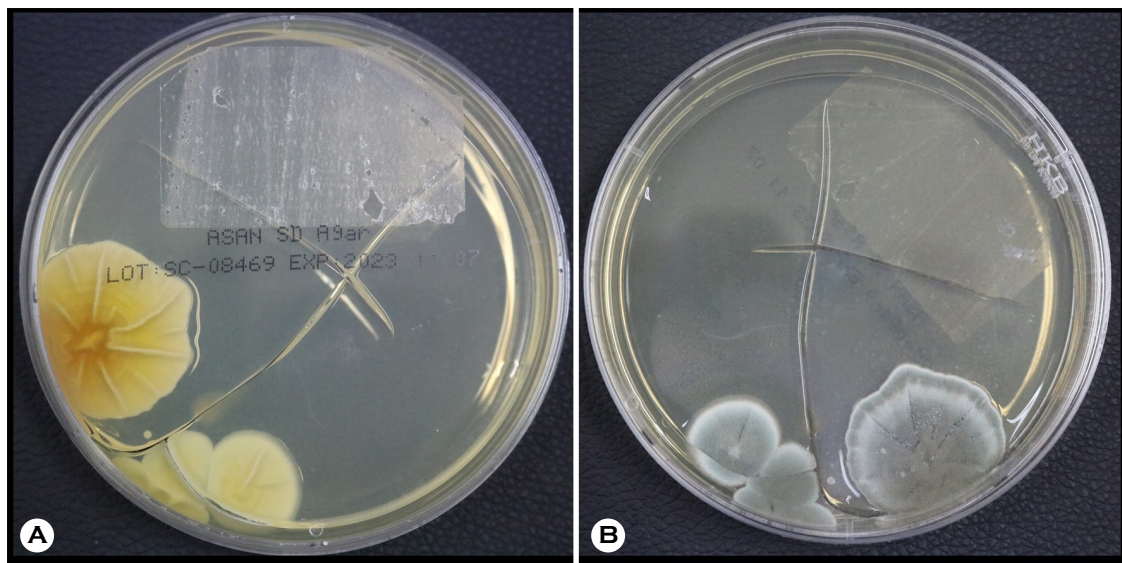


Fig. 1. (A) Reverse side of contaminated medium; (B) Front side of contaminated medium; This medium is believed to have been contaminated during the incubation process. Fungus was cultured somewhere other than the scratched area.

Fungal culture is a standard testing method for dermatomycosis along with the KOH test. However, its positive rate is lower than that of the KOH test, and although it is very specific, it is less sensitive^{1,2}. It is important to distinguish between contaminants and pathogens even after the fungus has been cultured.

Common fungal culture tests are performed on Sabouraud's dextrose agar and can be used with cycloheximide to prevent contamination³. However, a medium without cycloheximide

must be used to cultivate fungi other than dermatophytes. The positive rate can be increased only when sufficient specimens are collected and cultured. During culturing, nonselective and selective agar are simultaneously inoculated for samples from nonsterile locations or locations that may be contaminated with other microorganisms.

Scraping or curette inoculation on or into the agar at several points on the agar surface is the most suitable method for culture. The tissue must be mashed or minced and then uni-

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formly inoculated. If contamination does not occur and proper culture is performed, mold will grow at the inoculation site.

The photo below shows a case of contamination by *Penicillium* spp., which was confirmed using gross and microscopic findings. Cultures were conducted on three media plates, and the fungus was cultured only on the one shown in the photo (Fig. 1). It appears to be contaminated with an airborne fungus. When culturing fungi, it is important to take precautions to avoid confusing contaminants with pathogens.

Key Words: Contaminants, Fungus culture, *Penicillium* spp

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CONFLICT OF INTEREST

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

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