



**INTEGRATED PATHOLOGY SERVICE
MICROBIOLOGY DOCUMENT
WEST SUSSEX**

**Pathology User Manual
Microbiology Investigations
Fungi and Mycology**
[PD-MIC-UMFungiMyc]

AUTHOR:	Jonathan Lewis (Senior Biomedical Scientist)
APPROVED BY:	Paul Randell (Head Biomedical Scientist)
DATE OF ISSUE:	08/02/2024
DATE EFFECTIVE FROM:	08/02/2024
VERSION NO:	5
REVIEW DUE:	08/02/2026
COPY:	1
LOCATION OF COPIES:	1. Electronic – Q-Pulse

Fungi/Mycology: skin, nails & hair

Collect specimen in a clean dry container; ideally folded in stiff dark paper.

Please note Dermapaks are available from Pathology reception.

Optimum time and method of collection for:

- **Skin**

Patients' skin and nails can be swabbed with 70% alcohol prior to collection of the specimen, this is especially important if creams, lotions or powders have been applied. The edges of skin lesions yield the greatest quantities of viable fungus. Lesions should be scraped with a blunt scalpel blade.

- **Nail**

Good nail samples are difficult to obtain. It should be specified whether the sample is from the fingernails or toenails. Material should be taken from any discoloured, dystrophic or brittle parts of the nail. The affected nail should be cut as far back as possible through the entire thickness and should include any crumbly material. Nail drills, scalpels and nail elevators may be helpful but must be sterilized between patients. When there is superficial involvement (as in white superficial onychomycosis) nail scrapings may be taken with a curette. If associated skin lesions are present samples from these are likely to be infected with the same organism and are more likely to give a positive culture. Sample from associated sites should be sent in separate packets

- **Hair**

Samples from the scalp should include skin scales and hair stumps. Cut hairs are not suitable for direct examination as the infected area is usually close to the scalp surface. Scraping for direct examination is the preferable sample collection method, however plastic hairbrushes, scalp massage pads, swabs or plastic toothbrushes may be used to sample scalps for culture where there is little obvious scaling. If sufficiently long, hairs should be plucked with forceps and wrapped in black paper or commercial transport packs together with flakes of skin.

Adequate quantity and appropriate number of specimens

Numbers and frequency of specimen collection are dependent on clinical condition of patient. The minimum amount that is acceptable should be enough to cover a five pence piece.

Optimal transport and storage conditions

Collect specimens before antifungal therapy where possible.

Specimens should be transported and processed as soon as possible.

Specimens should be kept at room temperature and transported and processed as soon as possible although, provided the samples are kept dry, the fungus will remain viable for several months.

Limitations of laboratory examination

- Specimens with a 'positive' direct microscopy do not always result in a 'positive' culture. There are a variety of reasons for this, including the scarcity of fungus within the sample, or lack of viable fungus due to treatment received prior to the sample being taken.