

Medical Director: Lindsay B. Hardy, M.D.

Nail Unit Biopsy Report

Patient: Johnson, Thomas F. Age/Sex: 57/M DOB: 01/01/1960 Phone#: 888.555.1212 MRN: 12345	Physician: Joseph Smith, DPM Sunshine Foot & Ankle Center 1000 Main Street Anytown, MA 12345 Referring Physician: Referring Physician Fax:	Lab Case#: SP17-00001 Date Collected: 01/01/2017 Date Received: 01/01/2017 Date Reported: 01/02/2017 Accession#: QS17-00001
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Final Diagnosis

Nail, Right Great Toe, Biopsy:

POSITIVE FOR ONYCHOMYCOSIS.

TYPE: Dermatophytes.

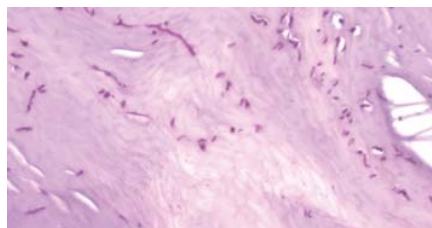
DISTRIBUTION: Subungual horn, lower nail plate.

OTHER FINDINGS:

- NAIL PLATE DYSTROPHY: Prominent.
- SUBUNGUAL HYPERKERATOSIS: Prominent.
- SUBUNGUAL SPONGIOSIS: Mild.
- MICROABSCESSES: Frequent.

AMOUNT OF SAMPLE: Abundant. All nail layers are represented.

Images


Onychomycosis, PAS stain

Microscopic Description

MICROSCOPIC DESCRIPTION:

Sections are of portions of nail plate with subungual hyperkeratosis. PAS and GMS stains for fungus are positive for fungal hyphae with morphologic features compatible with a dermatophyte, a causative agent of onychomycosis. No macroconidia or other specific features are present to allow speciation based on morphology in this specimen.

 The most common organism in this location is *Trichophyton rubrum*, however other fungi, including *T. mentagrophytes* (now designated as *T. interdigitale*) *Epidermophyton* and *Microsporum* species may also be causative agents.

The hyperkeratosis seen in this specimen is compatible with nail bed hyperkeratosis, suggestive of clinical onycholysis (separation of the nail from the nailbed), a common finding in "distal (lateral) subungual onychomycosis", the most common presentation of toenail infections.

Fungal infections of the foot are often preceded by various structural abnormalities of the nail, either extrinsic (i.e. trauma or injury), primary dermatoses (i.e. psoriasis), immunosuppression or systemic diseases (i.e. diabetes or vascular disease) or environments which enhance fungal infection (i.e. moist, warm environments). Correction of these conditions may assist in the reduction of recurrence of the infection after successful treatment.

Gross Description

Source	Description
Nail, Right Great Toe, Biopsy	Received fresh and labeled with the patient's name and "Right Great Toe" are multiple fragments of nail plate measuring 1.0 x 1.0 x 0.2cm in aggregate. The specimen is submitted in 1 cassette following softening. A portion is saved for future studies.

The accuracy of positive special stain controls have been confirmed upon review.



 Aldo Gonzalez-Serva, MD
 Final Report Electronically signed on 01/02/2017 at 12:00 PM