

**Patient: DOE, JOHN T**

Phone: (555)123-4567  
DOB (Age) / Sex: 1/1/1954 (56) / M  
Collect Date:  
Received Date: 7/23/2010

Ref Physician: JANE DOE, DPM  
111 YOUR ADDRESS HERE ST  
ATLANTA, GA 30309  
877-376-7284/

Copy To:

## PODIATRIC PATHOLOGY REPORT

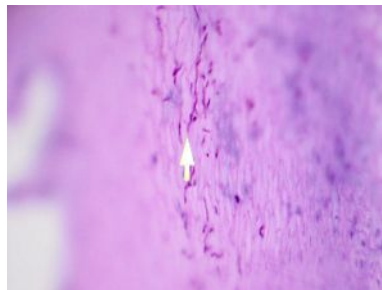
### DIAGNOSIS:

**NAIL PLATE AND ATTACHED SUPERFICIAL NAIL BED, RIGHT HALLUX, BIOPSY:**

- **ONYCHOMYCOSIS (probable dermatophyte infiltrating nail unit keratin).**
- **TOTAL DYSTROPHIC PATTERN OF GROWTH.**
- **FLORID FUNGAL GROWTH IS OBSERVED.**
- **HISTOPATHOLOGIC FEATURES INDICATIVE OF PERSISTENT (micro)TRAUMA.**
- **A PAS REACTION REVEALS FUNGAL HYPHAE.**

**COMMENT:** The fungal elements that are observed in this biopsy specimen possess features that are most characteristic of a **dermatophyte** (Trichophyton rubrum/T. mentagrophytes/Epidermophyton floccosum). In our experience, when these features are present, **T. rubrum is most often the offending organism.**

An additional significant finding is that of **traumatic onychodystrophy**. Such trauma-induced keratinization of the nail bed often represents a precursor to onychomycosis, as this disruption of nail unit integrity may give infectious elements access into the nail unit. Biomechanical and structural assessments indicated as possible etiologies include: varus fifth digits, long second digits, functional hallux limitus, and mallet toe deformity. **If clinically indicated, biomechanical manipulation (via functional orthoses) or shoe gear modification might be indicated in conjunction with antifungal therapy.**



### CLINICAL INFORMATION:

Nail Unit Dystrophy (Onychomycosis/Trauma); right hallux.

### GROSS DESCRIPTION:

Received in formalin are multiple irregularly-shaped fragments of nail measuring 1.0 X 1.0 X 1.0 cm. The tissue fragments are submitted in toto following softening.

### MICROSCOPIC DESCRIPTION:

Sections demonstrate an orthokeratotic nail plate with prominent nail bed keratinization. Subungual keratinocytes exhibit nuclear retention, abundant eosinophilic cytoplasm, and a compact character. A Periodic acid-Schiff (PAS) reaction demonstrates delicate septated fungal elements within nail unit keratin. Neither macroconidia nor a predominance of microconidia is seen.

Final Diagnosis performed by Joseph "Jody" Hackel, MD. Electronically signed 7/27/2010

**Patient: DOE, JOHN T**

**Accession #: B10-999996**

---