



Dennis B. Cornfield, M.D.

Chief, Section of Hematopathology & Clinical Laboratory Medicine

Department: Pathology & Laboratory Medicine

Division: Anatomic Pathology

Medical Training

University of Pennsylvania School of Medicine
MD

Internship

Graduate Hospital of the University of PA, Philadelphia, PA

Residencies

Internal Medicine
Graduate Hospital of the University of PA, Philadelphia, PA
Internal Medicine
Memorial Hospital for Cancer and Allied Diseases, New York, NY
Anatomic Pathology & Clinical Pathology
Thomas Jefferson University Hospital, Philadelphia, PA

Fellowship

Medical Oncology
Memorial Hospital for Cancer and Allied Diseases, New York, NY
Hematology
Georgetown University Hospital, Washington, DC
Hematopathology
Shands Hospital at the University of Florida, Gainesville, FL

Board Certification(s):

American Board of Pathology – Hematology
American Board of Pathology - Anatomic Pathology & Clinical Pathology
American Board of Internal Medicine – Hematology
American Board of Internal Medicine - Internal Medicine
American Board of Internal Medicine - Medical Oncology



Health Network
LABORATORIES

CENTER FOR ANATOMIC PATHOLOGY

Case History

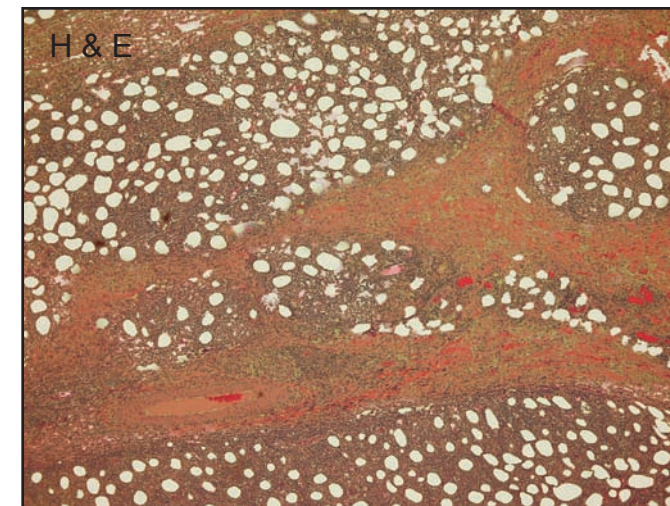
Subcutaneous Panniculitis-like T-cell Lymphoma

Dennis B. Cornfield, MD

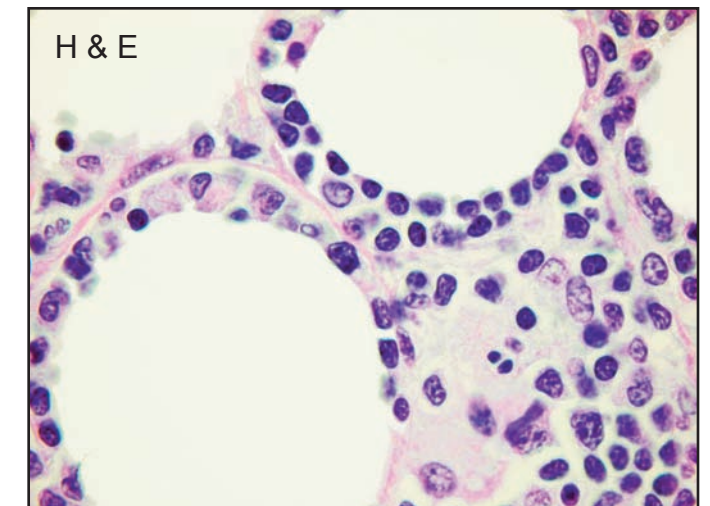
Chief, Section of Hematopathology & Clinical Laboratory Medicine
Department of Pathology & Laboratory Medicine

Presenting Case

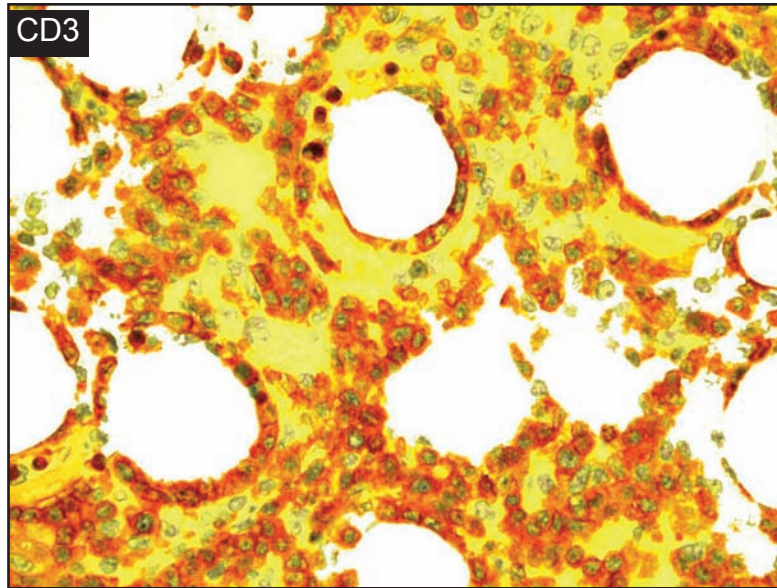
- Patient is a 26 year-old woman who presented for:
 - Incision and debridement of 9 cm area of induration and erythema, left lateral thigh
 - Initial microscopic diagnosis: inflammation and fat necrosis
- Patient subsequently had excision of a 2.7 cm subcutaneous mass, left groin



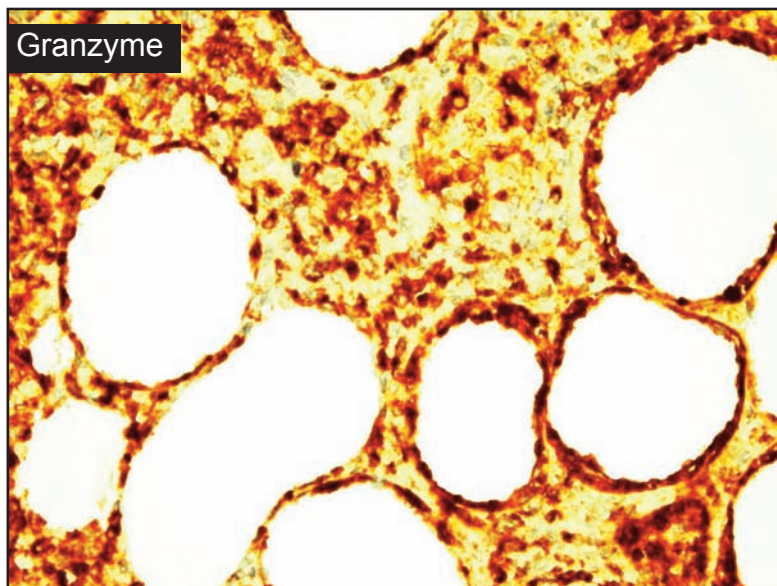
Interstitial infiltration of adipose tissue by mononuclear cells



Infiltrate consists of lymphocytes with irregular nuclear contours and some scattered histiocytes. Lymphocytes tend to form rim around fat cells.



Lymphocytes are predominantly CD3+ T-cells



T lymphocytes express the cytotoxic molecule Granzyme B (shown) as well as T-cell receptor alpha/beta (not shown)

Molecular Analysis: Positive for a clonal T-cell receptor gene rearrangement, consistent with the presence of a monoclonal population of T lymphocytes.

Diagnosis:

Subcutaneous panniculitis-like T-cell lymphoma, TCR α/β type

Treatment:

- Ontak (denileukin diftitox): recombinant fusion protein consisting of amino acid sequences of IL-2 and diphtheria toxin
- Given days 1-5 i-v q3 wks x 4 courses
- Patient was NED by PE, labs, and PET/CT at 2 months follow up

WHO-EORTC classification of cutaneous lymphomas with primary cutaneous manifestations

Cutaneous T-cell and NK-cell lymphomas

Mycosis Fungoides

MF variants and subtypes

Sezary syndrome

Adult T-cell leukemia/lymphoma

Primary cutaneous CD30+ lymphoproliferative disorders

- Primary cutaneous anaplastic large cell lymphoma
- Lymphomatoid papulosis

Subcutaneous panniculitis-like T-cell lymphoma (present case)

Extranodal NK/T-cell lymphoma, nasal type

Primary cutaneous peripheral T-cell lymphoma, rare subtypes:

- 1° cutan. aggressive epidermotropic CD8+ T-cell lymphoma (provisional)
- Cutaneous $\gamma\delta$ T-cell lymphoma
- Primary cutaneous CD4+ small/medium-sized pleomorphic T-cell lymphoma (provisional)

Interesting Case Features

1. This is a rare type of lymphoma (<1%) which usually occurs in young adults.
2. Diagnosis is often delayed because the clinical presentation and histologic findings mimic inflammation of fat (panniculitis)
3. Cases with the alpha/beta type of T-cell receptor (TCR) comprise the majority of cases and have a considerably better survival than those derived from T-cells with the gamma/delta TCR.