

Hemepath Case 5: 67-Year-Old Male

HISTORY

A 67-year-old man presents with a diffuse scaly erythematous rash throughout his entire body, including his palms and soles. The rash is extremely itchy. He has had several red, scaly patches on his left buttock and his right axilla for the past 5 years, which were pruritic at times. The patient assumed these skin lesions to be related to eczema, and thus never sought medical attention.

On physical exam, multiple large, hard, non-mobile lymph nodes are palpated in the cervical, axillary, and groin regions. The patient is noted to be shivering during the entire exam.

CBC

 $\begin{array}{ccc} \text{Hgb (g/L)} & \text{N} \\ \text{MCV} & \text{N} \\ \text{WBC} & \text{High} \\ \text{Plt} & \text{N} \end{array}$

DESCRIPTION OF SLIDE

Peripheral Blood Smear

The peripheral smear shows normal RBCs, neutrophils, and platelets. There are numerous abnormal mature lymphocytes, some with very convoluted (cerebriform) nuclei (see circles).

*** To see the slide annotations in Imagescope, click on VIEW, then ANNOTATIONS, and then on the "eye" icon adjacent to the word "Layers". In the "Layer Attributes" box, a brief description of the annotations is provided. You may also click on individual layer region (e.g. region 1) in the "Layer Regions" box to locate each annotation – this is especially helpful in identifying annotations when the slide is not zoomed in. ***

MORPHOLOGICAL DIAGNOSIS

Sézary syndrome

DISCUSSION

Sézary syndrome is an end-stage variant of mycosis fungoides, a cutaneous T cell lymphoma, and presents with a classic triad of generalized exfoliative erythroderma, diffuse lymphadenopathy, and leukemia. It is caused by a malignant proliferation of

CD4+ T cells which express cutaneous lymphocyte antigen (CLA) and have a predilection for skin (i.e. epidermotropism).

Skin biopsy would reveal a band-like infiltrate of malignant lymphocytes with convoluted, cerebriform nuclei (Sézary cells). The malignant cells may also form epidermal clusters, known as Pautrier microabscesses.