Test Information

Method
Indirect immunofluorescence on tissue specimens using antibodies to eosinophil granule major basic protein 1 (eMBP1) and eosinophil derived neurotoxin (EDN). See Compliance Statements B & D: www.arulab.com/CS.

Use
Assess eosinophil involvement in pathophysiology by semi-quantifying eosinophils and eosinophil products in tissue specimens and identifying eosinophil granule protein deposition that may be disproportionate to the number of intact cells. In the absence or presence of intact eosinophils in affected tissues and organs, identification of eosinophil degranulation likely is associated with clinical disease pathophysiology.

Follow eosinophil involvement in pathophysiology.

Considerations
Tissue specimens can be submitted fixed in formalin or in Michel’s or Zeus medium or frozen; specimens in paraffin blocks can be tested (submitted either in block or sectioned on slides per specific instructions).

In inflamed tissues, this test will determine whether eosinophils have disrupted and are no longer morphologically identifiable with routine tissue stains.

Patient Report

Patient’s immunodermatology report from the University of Utah continues on following pages.
IMMUNODERMATOLOGY REPORT

Patient: [Redacted]

Medical Record Number: [Redacted]

Gender: [Redacted]

DOB: [Redacted]

Age: [Redacted]

Physician(s): ARUP CLIENT

Clinic Location:
500 CHIPETA WAY
SALT LAKE CITY, UT 84108-1221

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Accession number: 16-287-401426

Procurement Date: 10/12/2016

Received Date: 10/17/2016

Specimen(s):
1. Left lower back, skin, punch

Clinical/Diagnostic Information:
76 year old with peripheral eosinophilia with pruritic nodular and blistering skin rash.

DIAGNOSTIC INTERPRETATION

Positive eosinophil granule major basic protein 1 (eMBP1) staining demonstrating extensive extracellular deposition throughout the dermis, likely obfuscating cellular infiltration (See Results and Comments)

RESULTS

Examination of the tissue sections stained for eosinophil granule major basic protein 1 (eMBP1) reveals:

Cellular: Indeterminate; cellular infiltration likely present and obfuscated by extracellular staining

Extracellular: 2-3 intensity, 2-3+ extent including along basement membrane zone, thick perivascular, and patchy deposition on connective tissue fibers

COMMENTS

Eosinophil infiltration and/or degranulation are not normally present in tissues other than thymus, lymph node, gastrointestinal tract from stomach through large intestine and bone marrow. Therefore, the extensive extracellular eosinophil granule major basic protein 1 (eMBP1) staining is abnormal in this skin biopsy specimen. The extracellular staining likely obfuscates cellular staining and appears out-of-proportion to the number of infiltrating cells. Certain of the staining features are similar to the extracellular eMBP1 staining observed in atopic dermatitis (Reference). The staining pattern generally appears similar.

Billing Codes: 88305 IMMUNO; 88342 IMMUNO

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