ARUP LABORATORIES
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Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	12/31/1984
Gender:	Male
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Basement Membrane Zone (Epithelial) Antibodies, IgA by IIF

ARUP test code 0092057

Epithelial BMZ Ab, IgA

See Note

CLINICAL INFORMATION
Annular erythema and occasional blisters for 3 months

Specimen Details
S22-IP0000827 - Serum; Collected: 7/8/2022; Received: 7/11/2022

DIAGNOSTIC INTERPRETATION

Negative IgA basement membrane zone antibodies by indirect immunofluorescence

(See Results and Comments including further testing recommendations)

RESULTS
Indirect Immunofluorescence (IIF)

Basement Membrane Zone (BMZ) IgA Antibodies

IgA: Negative, monkey esophagus substrate
Negative, human split skin substrate

Reference Range:
Negative - Titer less than 1:10
Borderline - Titer 1:10
Positive (H) - Titer greater than 1:10

Localization Pattern on Human BMZ Split Skin:
Epidermal (roof), combined epidermal-dermal (roof and floor), or, dermal (floor) IgA BMZ antibodies = linear IgA disease (including linear IgA bullous dermatosis and chronic bullous disease of childhood)

(H) = high/positive

COMMENTS

Specific

The negative findings for IgA basement membrane zone antibodies by indirect immunofluorescence on both monkey esophagus substrate and split skin substrate (also known as salt split skin) do not provide support for, but do not rule out, the diagnosis of linear IgA disease, including linear IgA bullous dermatosis and chronic bullous disease of childhood. The results do not rule out other immunobullous diseases.

H=High, L=Low, *=Abnormal, C=Critical

Detection, levels, and patterns of diagnostic antibodies may fluctuate with disease expression. Clinical correlation is needed, including with direct immunofluorescence findings on a biopsy specimen and treatment status. If indicated to further evaluate for immunobullous disease, additional serum testing may be performed on this specimen by contacting ARUP Client Services at 1-800-242-2787, option 2, with add-on test request(s) for:
- Basement Membrane Zone (Epithelial) Antibodies, IgG by IIF (ARUP test number 0092056),
- Bullous Pemphigoid (BP180 and BP230) Antibodies, IgG by ELISA (ARUP test number 0092566),
- Collagen Type VII Antibody, IgG by ELISA (ARUP test Number 2010905), and/or
- Pemphigus Antibody Panel, IgG (ARUP test number 0090650).

Monitoring antibody profiles and levels may aid in assessing disease expression and activity, particularly for persisting, progressing, or changing disease.

General

Positive serum IgA epithelial basement membrane zone antibodies by indirect immunofluorescence are highly specific diagnostic markers for linear IgA disease and are present in sera of up to 80 percent of patients with linear IgA bullous dermatosis and chronic bullous disease of childhood. Linear IgA disease may be drug-induced, most commonly with vancomycin. IgA basement membrane zone antibodies also may be found in variant presentations of mucous membrane pemphigoid and epidermolysis bullosa acquisita. IgA basement membrane zone antibodies may be co-expressed with IgG basement membrane zone antibodies in some patients with pemphigoid, including mucous membrane/cicatricial pemphigoid, and are characteristically expressed in linear IgA/IgG bullous dermatosis. The presence of two antibody classes with reactivity toward the basement membrane zone may have implications for disease severity and treatment considerations. Positive IgA basement membrane zone antibodies may be useful markers for following disease expression and activity, and, based on the presence of IgA epithelial antibodies, dapsone therapy may be indicated (if glucose-6-phosphate dehydrogenase, G6PD, enzymatic activity in blood is normal).

TESTING METHODS
Indirect Immunofluorescence (IIF)

IgA Epithelial Basement Membrane Zone (BMZ) Antibodies

Patient serum is progressively diluted beginning at 1:5 in three two-fold screening dilutions, layered on sections of human skin split at the basement membrane zone and monkey esophagus substrates, and reacted with fluorescein isothiocyanate (FITC)-conjugated antibody to IgA. When positive, the serum is further diluted in two-fold reductions to the limiting dilution of antibody detection or to a maximum dilution of 1:40,960. The limiting-dilution, end-point titer is reported for each substrate, and the pattern of staining on split skin substrate also is reported. This indirect immunofluorescence testing was developed and its performance characteristics determined by the Immunodermatology Laboratory at the University of Utah. It has not been cleared or approved by the FDA (US Food and Drug Administration). FDA clearance or approval currently is not required for this testing performed in a CLIA-certified laboratory (Clinical Laboratory Improvement Amendments) and intended for clinical use. [Indirect immunofluorescence, one antibody on two substrates (IIF X 2)]

Electronically signed by [redacted]
Performed At: IMMUNODERMATOLOGY LABORATORY

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SALT LAKE CITY, UT 84108
Medical Director: JOHN JOSEPH ZONE, MD
CLIA Number: 46D0681916

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Epithelial BMZ Ab, IgA	22-189-103594	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical