

Patient: [REDACTED]
DOB: N/A Age: [REDACTED] Gender: M
Patient Identifiers: [REDACTED]
[REDACTED]
Visit Number (FIN): [REDACTED]

Client: [REDACTED]
Physician: Doctor Unknown

ARUP Test Code: 0090649
Collection Date: 10/16/2019
Received in lab: 10/24/2019
Completion Date: 10/28/2019

Test Information

Method

Desmoglein 1 and desmoglein 3 IgG serum antibody levels determined by FDA-approved enzyme linked immunosorbent assays (ELISA). (DSG 1 & DSG 3 ELISA Test System, MBL BION).

Use

Aid in the diagnosis of pemphigus foliaceus and pemphigus vulgaris. Antibody levels may be used to distinguish pemphigus foliaceus from pemphigus vulgaris and other immune-mediated skin diseases as well as monitor disease activity and therapeutic response.

Monitor patient with previously diagnosed pemphigus and increased IgG desmoglein 1 and/or 3 antibodies.

Consideration

Use of this test with epithelial cell surface antibodies by indirect immunofluorescence (IFA) will increase sensitivity and identify patients with pemphigus antibodies to epitopes other than those in this assay.

Patients with pemphigus may show antibody reactivity that changes over time; therefore, periodic monitoring of disease activity (Epithelial Cell Surface Antibodies by IFA, Desmoglein 1 and 3 ELISAs, and Pemphigus Panel) is strongly recommended.

Repeat testing recommended for indeterminate results and/or continuing clinical consideration of the disease, persistence, and/or worsening disease activity.

For rare types of pemphigus, refer to IgA Pemphigus and Paraneoplastic Pemphigus testing.

For testing algorithm and additional information about immunobullous skin diseases, refer to: arupconsult.com/Topics/ImmunobullousSkinDz.

Patient Report

Patient's immunodermatology report from the University of Utah continues on following pages.



Patient: [REDACTED]
ARUP Accession: 19-296-401415
[REDACTED]



John J. Zone, M.D. - Co-Director
Kristin M. Leiferman, M.D. - Co-Director
Melanie K. Kuechle, M.D.

30 North 1900 East, SOM 4A330
Salt Lake City, UT 84132-2409

Phone: 1-866-266-5699
Fax: 801-585-5695

immunodermatology.uofumedicine.org

Department of Dermatology
Immunodermatology Laboratory

IMMUNODERMATOLOGY REPORT

Patient: [REDACTED]		Accession number: [REDACTED]	
Medical Record Number:	[REDACTED]	Procurement Date:	10/16/2019
Gender: M	DOB: [REDACTED]	Received Date:	10/24/2019
Age:	[REDACTED]		
Physician(s):	Clinic Location:	Phone:	[REDACTED]
[REDACTED]	[REDACTED]	Fax:	[REDACTED]

Specimen(s) :

1. Serum specimen

Clinical/Diagnostic Information:
No clinical information provided.

DIAGNOSTIC INTERPRETATION

Consistent with pemphigus vulgaris

(See Results and Comments)

RESULTS

Enzyme-Linked Immunosorbent Assay (ELISA)

Desmoglein (DSG) 1 and 3 IgG Antibodies

IgG desmoglein 1 antibodies: 0 units

Reference Range:

Positive (H) = Greater than 20 units
Borderline/Indeterminate = 14-20 units
Negative = Less than 14 units

IgG desmoglein 3 antibodies: 162 units (H)

(Initial level, 138 units, greater than high calibrator; diluted to achieve 81 units, within assay calibrators, and multiplied by the dilution factor of 2)

Reference Range:

Positive (H) = Greater than 20 units
Borderline/Indeterminate = 9-20 units

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TRIAL MODE - [Click here for more information](#)



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ARUP Accession: 19-296-401415

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MRN: [REDACTED]

Negative = Less than 9 units

(H = high/increased; units = units/mL serum)

COMMENTS

Specific

These ELISA results, demonstrating an increased IgG desmoglein 3 antibody level and a normal IgG desmoglein 1 antibody level, support the diagnosis of pemphigus vulgaris.

IgG cell surface antibodies by indirect immunofluorescence and IgG desmoglein antibody levels by ELISA testing correlate with disease activity in pemphigus. Additional testing for serum IgG Epithelial Cell Surface Antibodies by indirect immunofluorescence (ARUP test number 0090266) may be performed on this specimen by add-on test request through ARUP Client Services, 1-800-242-2787 option 2, if indicated to further evaluate the immunopathological profile.

Clinical correlation is needed with consideration for monitoring antibody profiles by indirect immunofluorescence as well as antibody levels by ELISAs in assessing disease expression and activity, including response to therapy.

Serum dilution testing is based on performance assessments of the desmoglein ELISAs in which serum is diluted so that units are within the calibrator range, multiplied by the dilution factor and reported. Other laboratories that do not perform dilution testing may report results analogous to the initial level which is helpful for diagnosis; however, the diluted level likely better represents an antibody parameter for comparison and monitoring disease activity.

Questions about these results, including dilution testing, may be addressed by contacting ARUP Client Services at 1-800-242-2787 option 2 and ask to speak with the Immunodermatology Laboratory at the University of Utah regarding patient results.

General

Antibodies in serum from individuals with pemphigus bind to desmogleins, which are calcium-dependent adhesion molecules in cell surface desmosomes; such antibodies are detected by enzyme-linked immunosorbent assay (ELISA) testing. Desmoglein antibodies are not increased in normal individuals. Specific reactivity to the type of desmoglein may be helpful in determining pemphigus subtypes; IgG desmoglein 1 autoantibodies predominate in patients with pemphigus foliaceus, and IgG desmoglein 3 autoantibodies, with or without accompanying desmoglein 1 autoantibodies, predominate in patients with pemphigus vulgaris. Overlapping

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IMMUNODERMATOLOGY REPORT

Patient:



Accession
number:



MRN:

expression with autoantibodies to both desmogleins 1 and 3 typically is associated clinically with both mucosal and skin lesions. ELISA testing for IgG desmoglein 1 and IgG desmoglein 3 antibodies is highly sensitive, with greater than 90 percent of pemphigus patients showing increased levels of one or both antibodies.

TESTING METHODS

Enzyme-Linked Immunosorbent Assay (ELISA)

Desmoglein 1 and desmoglein 3 IgG serum antibody levels and additional desmoglein 3 IgG antibody level with diluted serum for comparative level determined by U.S. Food and Drug Administration-approved ELISAs. (Mesacup, MBL BION). [Three ELISAs]

 MD

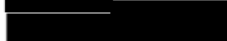
Immunodermatologist

Electronically signed 10/26/2019 5:51:00PM

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ARUP LABORATORIES | 800-522-2787 | aruplab.com

500 Chipeta Way, Salt Lake City, UT 84108-1221

Tracy I. George, MD, Chief Medical Officer

END OF CHART

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