ARUP LABORATORIES | aruplab.com
500 Chipeta Way, Salt Lake City, Utah 84108-1221
phone: 801-583-2787, toll free: 800-522-2787
Jonathan R. Genzen, MD, PhD, Chief Medical Officer

PATIENT REPORT

Patient Age/Sex: 57 years Female

Specimen Collected: 11-Dec-23 13:01

Motor Sensory Neuropathy Comprehensive | **Received: 11-Dec-23 13:05** | **Report/Verified: 11-Dec-23 13:14**

Procedure	Result	Units	Reference Interval
MAG Antibody,IgM Elisa	**2000** H i1	TU	[0-999]
SGPG Antibody,IgM	**4.99** H i2	IV	[0.00-0.99]
Purkinje Cell/Neuronal Nuclear IgG Scrn	**PCCA Detected** * f1 i3		[None Detected]
Asialo-GM1 Antibodies,IgG/IgM	**500** H	IV	[0-50]
GM1 Antibodies,IgG/IgM	**250** H	IV	[0-50]
GD1a Antibodies,IgG/IgM	See Note f2	IV	[0-50]
GD1b Antibodies,IgG/IgM	**300** H	IV	[0-50]
GQ1b Antibodies,IgG/IgM	**400** H i4	IV	[0-50]
EER Motor Sensory Neuropathy Comp	See Note f3		
Immunoglobulin G	**4000** H	mg/dL	[768-1632]
Immunoglobulin A	**20** L	mg/dL	[68-408]
Immunoglobulin M	**10** L	mg/dL	[35-263]
Total Protein,Serum	**8.6** H	g/dL	[6.3-8.2]
Albumin	**3.50** L	g/dL	[3.75-5.01]
Alpha 1 Globulin	**0.18** L	g/dL	[0.19-0.46]
Alpha 2 Globulin	**0.47** L	g/dL	[0.48-1.05]
Beta Globulin	**0.39** L	g/dL	[0.48-1.10]
Gamma	**4.06** H	g/dL	[0.62-1.51]
Monoclonal Protein	**4.06** H	g/dL	[<=0.00]
Immunofixation	IFE Done		
SPEP/IFE Interpretation	See Note f4		

Neuronal Nuclear Ab IgG, Immunoblot, Ser | **Received: 11-Dec-23 13:05** | **Report/Verified: 11-Dec-23 13:14**

Procedure	Result	Units	Reference Interval
Neuronal Nuclear Ab (Hu) IgG,IB, Serum	**Positive** * i5		[Negative]
Neuronal Nuclear Ab (Ri) IgG,IB, Serum	**Positive** * i6		[Negative]
Neuronal Nuclear Ab (Yo) IgG,IB, Serum	**Positive** * i7		[Negative]
Neuronal Nuclear Ab (TR/DNER) IgG,IB	**Positive** * i8		[Negative]

Purkinje Cell Ab Titer, IgG | **Received: 11-Dec-23 13:05** | **Report/Verified: 11-Dec-23 13:14**

Procedure	Result	Units	Reference Interval
Purkinje Cell Antibody Titer IgG	**1:640** * i9		[<1:10]

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

Result Footnote

f1: Purkinje Cell/Neuronal Nuclear IgG Scrn

Antibodies detected, therefore IFA titer and Immunoblot testing to be performed.

f2: GD1a Antibodies, IgG/IgM

GD1a Antibodies IgG/IgM testing was not performed due to unsatisfactory reagent performance. A credit will be issued for this component.

f3: EER Motor Sensory Neuropathy Comp
Authorized individuals can access the ARUP Enhanced Report using the following link:

f4: SPEP/IFE Interpretation
Monoclonal spike in the gamma region. IFE gel pattern shows an IgG type kappa monoclonal protein.

Test Information

i1: MAG Antibody, IgM Elisa
INTERPRETIVE INFORMATION: MAG Antibody, IgM ELISA

An elevated IgM antibody concentration greater than 999 TU against myelin-associated glycoprotein (MAG) suggests active demyelination in peripheral neuropathy. A normal concentration (less than 999 TU) generally rules out an anti-MAG antibody-associated peripheral neuropathy.

TU=Titer Units

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i2: SGPG Antibody, IgM
INTERPRETIVE INFORMATION: SGPG Antibody, IgM

The majority of sulfate-3-glucuronyl paragloboside (SGPG) IgM-positive sera will show reactivity against MAG. Patients who are SGPG IgM positive and MAG IgM negative may have multi-focal motor neuropathy with conduction block.

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i3: Purkinje Cell/Neuronal Nuclear IgG Scrn
INTERPRETIVE INFORMATION: Purkinje Cell/Neuronal Nuclear IgG Scrn

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug

Test Information

i3: Purkinje Cell/Neuronal Nuclear IgG Scrn
Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i4: GQ1b Antibodies, IgG/IgM
INTERPRETIVE INFORMATION: Ganglioside (Asialo-GM1, GM1, GM2, GD1a, GD1b, and GQ1b) Antibodies, IgG/IgM

29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

Ganglioside antibodies are associated with diverse peripheral neuropathies. Elevated antibody levels to ganglioside-monosialic acid (GM1), and the neutral glycolipid, asialo GM1 are associated with motor or sensorimotor neuropathies, particularly multifocal motor neuropathy. Anti-GM1 may occur as IgM (polyclonal or monoclonal) or IgG antibodies. These antibodies may also be found in patients with diverse connective tissue diseases as well as normal individuals. GD1a antibodies are associated with different variants of Guillain-Barre syndrome (GBS) particularly acute motor axonal neuropathy while GD1b antibodies are predominantly found in sensory ataxic neuropathy syndrome. Anti-GQ1b antibodies are seen in more than 80 percent of patients with Miller-Fisher syndrome and may be elevated in GBS patients with ophthalmoplegia. The role of isolated anti-GM2 antibodies is unknown. These tests by themselves are not diagnostic and should be used in conjunction with other clinical parameters to confirm disease.

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i5: Neuronal Nuclear Ab (Hu) IgG, IB, Serum
INTERPRETIVE INFORMATION: Neuronal Nuclear Ab IgG, Immunoblot, Ser
This test detects IgG antineuronal antibodies to Hu, Ri, Yo and Tr (DNER) antigens.

Antineuronal antibodies serve as markers that aid in discriminating between a true paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-Hu (antineuronal nuclear antibody, type I) is associated with small-cell lung cancer. Anti-Ri (antineuronal nuclear antibody, type II) is associated with neuroblastoma in children and with fallopian tube and breast cancer in adults. Anti-Yo (anti-Purkinje cell cytoplasmic antibody) is associated with ovarian and breast cancer. Anti-Tr(DNER) is associated with Hodgkin's lymphoma.

The presence of one or more of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.

Test Information

i5: Neuronal Nuclear Ab (Hu) IgG, IB, Serum

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i6: Neuronal Nuclear Ab (Ri) IgG, IB, Serum

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB, Serum

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i7: Neuronal Nuclear Ab (Yo) IgG, IB, Serum

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Yo) IgG, IB, Serum

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i8: Neuronal Nuclear Ab (TR/DNER) IgG, IB

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (TR/DNER) IgG, IB

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i9: Purkinje Cell Antibody Titer IgG

INTERPRETIVE INFORMATION: Purkinje Cell Ab Titer, IgG

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