Immune System Health

Autoimmune Disease

Your body's immune system protects you from disease and infection. But if you have an autoimmune disease, your immune system attacks healthy cells in your body by mistake. Autoimmune diseases can affect many parts of the body. There are more than 80 types of autoimmune diseases, and some have similar symptoms. Often, the first symptoms are fatigue, muscle aches and a low fever. The classic sign of an autoimmune disease is inflammation, which can cause redness, heat, pain and swelling. The diseases may also have flare-ups, when they get worse, and remissions, when symptoms get better or disappear.

Hide

INTERPRETATION See Below

Range: See Comments

INTERPRETATION

Result Comments

NEGATIVE
This test did not detect abnormal levels of anti-MuSK antibodies.

TECHNICAL RESU... See Below

Range: See Comments

TECHNICAL RESULTS

Result Comments

Interpretive Result Table

INTERPRETIVE RESULT: Negative
TEST: anti-MuSK
TECHNICAL RESULT: <1:10
REFERENCE RANGE: Negative <1:10, Borderline 1:10, Positive >=1:20

See Note 1

COMMENTS See Below

Range: See Comments

COMMENTS

Result Comments

Comments: This result does not exclude a diagnosis of Myasthenia Gravis.

Recommendations: Health care providers, please contact the Athena Diagnostics Client Services Department at 1-800-394-4493 if you wish to speak with a clinical consultant regarding this test result.

Other testing available: If there is high clinical suspicion for myasthenia gravis, consider testing for LRP4 antibodies.

Background information:Myasthenia gravis (MG) is an autoimmune disease affecting the neuromuscular junctions of skeletal muscles. The predominant clinical feature is fatigability and weakness of the muscles that typically become progressively worse during periods of sustained activity and improve after periods of rest (1,2). Age of onset of MG is variable with an overall incidence of approximately 15:100,000 (1).
Anti-MuSK antibodies have been associated with Myasthenia Gravis (3,4). Although the majority of patients with generalized myasthenia gravis (MG) have antibodies against AChR (AChR-MG), 10-15% are seronegative. Within this group, about 40% have anti-MuSK antibodies, representing 5-8% of the MG population (3,4). Diagnosis of MuSK MG can be challenging due to its atypical presentation, including few symptom fluctuations, non-responsiveness to acetylcholinesterase inhibitors in a significant proportion of patients and negative electrodiagnostic studies when performed on limb muscles (4).

METHODS See Below

Range: See Comments

METHODS

Result Comments

Detection of antibodies was performed by Radioimmunoassay (RIA) methodology.

Limitations of analysis: Reagent effectiveness may affect the signal intensity of the response. Although rare, false positive or false negative results may occur. All results should be interpreted in the context of clinical findings, relevant history, and other laboratory data.
Detection of antibodies was performed by Radioimmunoassay (RIA) methodology.

Limitations of analysis: Reagent effectiveness may affect the signal intensity of the response. Although rare, false positive or false negative results may occur. All results should be interpreted in the context of clinical findings, relevant history, and other laboratory data.

REFERENCES See Below

Range: See Comments

REFERENCES

Result Comments

1. Scherer, K, et al. (2005) JAMA 293: 1906-14. (PMID: 15840866)
2. Bedlack, RS, et al. (2000) Postgrad Med 107: 211-4, 220-2. (PMID: 10778421)
3. Berrih-Aknin, S, et al. (2014) J Autoimmun 52: 90-100. (PMID: 24389034)
4. Evoli, A, et al. (2013) Autoimmun Rev 12: 931-5. (PMID: 23535158)

This test was developed and its analytical performance characteristics have been determined by Athena Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Laboratory oversight provided by Vivekananda Datta, M.D., Ph.D., CLIA license holder, Athena Diagnostics (CLIA# 22D0069726)

Testing performed at:
Athena Diagnostics 200 Forest Street Marlborough, MA 01752

1. Scherer, K, et al. (2005) JAMA 293; 1906-14.
(PMID: 15840866)
2. Bedlack, RS, et al. (2000) Postgrad Med 107:
211-4, 220-2. (PMID: 10778421)
3. Berrih-Aknin, S, et al. (2014) J Autoimmun 52:
90-100. (PMID: 24389034)
4. Evoli, A, et al. (2013) Autoimmun Rev 12:
931-5. (PMID: 23535158)

Note 1

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.