

UPMC Health Plan POLICY AND PROCEDURE MANUAL

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SUBJECT: AntiMuSK Antibody Test for Myasthenia Gravis
INDEX TITLE: Medical Management
ORIGINAL DATE: January 2009

This policy applies to the following lines of business: (Check those that apply.)

Commercial:					
HMO ()	POS ()	PPO ()	OOA/DOC ()		
Fully Insured ()	Self-funded/ASO ()	HSA ()	All (X)		
Medicare Select ()	Medicare Supplement ()				
DPW-MA:					
Health Choices ()	Voluntary ()		All (X)		
CMS-MA:					
HMO (X)	PPO (X)	Specialty Needs Plan (X)	Part D ()	PFFS (X)	All ()
PID-CHIP:					
Free ()	Sub ()		All (X)		

I. POLICY

It is the policy of UPMC Health Plan to cover the AntiMuSK Antibody Test for Myasthenia Gravis when it is medically necessary and covered by the member's benefit plan.

II. DEFINITIONS

Acetylcholine Receptor (AChR) Antibody Test-a blood test to measure the amount of antibody directed against the acetylcholine receptor.

Myasthenia Gravis (MG) -is a life-long condition in which the body's immune system fights its own body. This causes problems with the nerves that provide communication to the muscles resulting in muscle weakness. This disease affects the voluntary muscles of the body that include the face, neck, chest, arms, and legs.

Tensilon Test- Tensilon is the trade name for edrophonium chloride. The Tensilon test is an injection of edrophonium chloride into a vein and watching for rapid improvement of strength, usually of eye muscles. This test is used to diagnosis Myasthenia Gravis (MG).

Thymectomy- The thymus is a gland located in the chest area that helps the immune system develop. The thymus may be removed as a treatment of Myasthenia Gravis in the hope of increasing the chance of remission (absence of symptoms and no need of medication) from the disease.

III. PURPOSE

The purpose of this policy is to describe coverage for the AntiMuSK Antibody Test for Myasthenia Gravis.

IV. SCOPE

This policy applies to various UPMC Health Plan departments as indicated by the Benefit and Reimbursement Committee. These include but are not limited to: Medical Management, Benefit Configuration and Claims departments.

V. PROCEDURE

A. Medical Background

Myasthenia gravis (MG) is an autoimmune disease, in which antibodies directed against post-synaptic components of the neuromuscular junction lead to impaired neuromuscular transmission and weakness. The prevalence of MG in the United States is estimated at 14 per 100,000 people and may be underdiagnosed. Circulating antibodies to the acetylcholine receptor (AChR) are found in up to 80% of patients with autoimmune MG. MG patients who are seronegative for AChR antibodies also clearly have an antibody-mediated disorder. This is attributed to muscle specific tyrosine kinase (MuSK) which is a surface membrane enzyme that is essential in aggregating AChRs during the development of the neuromuscular junction. Recent studies have shown that antibodies to MuSK are present in 40% to 50% of patients with generalized seronegative MG. Anti-MuSK antibodies have not been found in patients with purely ocular myasthenia or in those with anti-AChR antibodies.

The diagnosis of MG is ruled out with a AChR antibody test (test positive in 80% of cases), single fiber EMG, or the AntiMuSK antibody test (in seronegative MG patients), with treatment being a thymectomy.

B. Indications

AntiMuSK antibody testing is covered when the member's AChR antibody test is negative:

C. Limitations

1. The AntiMuSK antibody test is not covered when:
 - AChR antibody test is positive,
OR
 - When the condition is purely ocular MG.

D. Variations

N/A

E. References

1. Donald B. Sanders MD, Professor of Neurology at Duke University Medical Center, Durham, NC, Neurocast Anti-Musk Antibodies in Myasthenia Gravis. Accessed 12-12-08. http://www.neurocast.com/site/content/sessions_07_2003.asp
2. Donald B. Saunders , Khalid El-Salem , et.al., Muscle Specific Tyrosine Kinase (MuSK) Positive, Seronegative Myasthenia Gravis (SN-MG) Clinical Characteristics and response to Therapy, Abstract from American academy of Neurology meeting, March/April 2003.
3. Cleveland Clinic Reference Laboratory-Test Directory: MuSK Antibody Test (Ordering Mnemonic MUSK), 12-15-08.
<http://referencelab.clevelandclinic.org/DBSearch/TestDetail.asp?ID=3336>
4. MuSK Antibody Clinical Overview, Athena Diagnostics, October 2004.
5. Clinical Overview of Paraneoplastic Testing Services, Athena Diagnostics, July 2006.
6. Lan Zhou MD, PhD, John McConville MRCP, et. al. Al., Clinical Comparison of Muscle-Specific Tyrosine Kinase (MuSK) Anti-body Positive and Negative Myasthenic Patients, Muscle and Nerve, July 2004.
7. Net Wellness, Myasthenia Gravis, 9-16-08.
<http://www.netwellness.org/search/listall.cfm?searchstring=myasthenia+gravis>
8. University of Rochester Medical Center Glossary –Neurological Disorders: Myasthenia Gravis, 12-15-08.
<http://www.urmc.rochester.edu/encyclopedia/content.cfm?pageid=P02602#M>
9. Net Wellness, Myasthenia Gravis: What is the Role of the Thymus and a Thymectomy in Myasthenia Gravis, 12-15-08.
<http://www.netwellness.org/healthtopics/gravis/box5.cfm#a>

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