

## The Myasthenia Gravis Composite score – MGC score

The Myasthenia Gravis Composite score has been validated as an outcome measure of signs and symptoms for patients with myasthenia gravis (MG). The score was first described by Burns et al. (2008) and has been replicated for the use in MGC in the *Criteria* from Burns et al. (2010). The *Criteria* requires submission of a score calculated by completing each section in the table after assessment of both physician examination and patient reported signs and symptoms.

### The Myasthenia Gravis Composite score

<b>Ptosis, upward gaze (physician examination)</b>  <div><div>0</div> = &gt; 45 seconds</div> <div><div>1</div> = 11 - 45 seconds</div> <div><div>2</div> = 1 - 10 seconds</div> <div><div>3</div> = immediate</div>	Score <div></div>
<b>Double vision on lateral gaze, left or right (physician examination)</b>  <div><div>0</div> = &gt; 45 seconds</div> <div><div>1</div> = 11 - 45 seconds</div> <div><div>3</div> = 1 - 10 seconds</div> <div><div>4</div> = immediate</div>	Score <div></div>
<b>Eye closure (physician examination)</b>  <div><div>0</div> = Normal</div> <div><div>0</div> = Mild weakness (can be forced open with effort)</div> <div><div>1</div> = Moderate weakness (can be forced open easily)</div> <div><div>2</div> = Severe weakness (unable to keep eyes closed)</div>	Score <div></div>
<b>Talking (patient history)</b>  <div><div>0</div> = Normal</div> <div><div>2</div> = Intermittent slurring or nasal speech</div> <div><div>4</div> = Constant slurring or nasal but can be understood</div> <div><div>6</div> = Difficult to understand speech</div>	Score <div></div>
<b>Chewing (patient history)</b>  <div><div>0</div> = Normal</div> <div><div>2</div> = Fatigue with solid food</div> <div><div>4</div> = Fatigue with soft food</div> <div><div>6</div> = Gastric tube</div>	Score <div></div>
<b>Swallowing (patient history)</b>  <div><div>0</div> = Normal</div> <div><div>2</div> = Rare episode of choking or trouble swallowing</div> <div><div>5</div> = Frequent trouble swallowing, eg. necessitating changes in diet</div> <div><div>6</div> = Gastric tube</div>	Score <div></div>
<b>Breathing (thought to be caused by MG)</b>  <div><div>0</div> = Normal</div> <div><div>2</div> = Shortness of breath with exertion</div> <div><div>4</div> = Shortness of breath at rest</div> <div><div>9</div> = Ventilator dependence</div>	Score <div></div>
<b>Neck flexion or extension (weakest, physician examination)</b>  <div><div>0</div> = Normal</div> <div><div>1</div> = Mild weakness</div> <div><div>3*</div> = Moderate weakness (ie.~50% weak, ±15%)</div> <div><div>4</div> = Severe weakness</div>	Score <div></div>

**Shoulder abduction (physician examination)**

- 0** = Normal  
**2** = Mild weakness  
**4\*** = Moderate weakness (ie. ~50% weak,  $\pm 15\%$ )  
**5** = Severe weakness

Score


**Hip flexion (physician examination)**

- 0** = Normal  
**2** = Mild weakness  
**4\*** = Moderate weakness (ie. ~50% weak,  $\pm 15\%$ )  
**5** = Severe weakness

Score

Total score (maximum possible score 50)

\*Moderate weakness for neck and limb items should be construed as weakness that equals roughly 50% plus or minus 15% of expected normal strength. Any weakness milder than that would be mild and any weakness more severe than that would be classified as severe.

The Myasthenia Gravis Composite score replicated from [Burns TM, Conaway M, Sanders DB. The MG composite: a valid and reliable outcome measure for myasthenia gravis. Neurology 2010 May 4; 74\(18\): 1434–40](#)  with permission from T.M.Burns.