Concept Map Template

Primary Diagnosis: **Myasthenia Gravis**

1. Describe the pathophysiology of the primary diagnosis in your own words. What are the patient's risk factors for this diagnosis?

<table>
<tr><td colspan="2">Pathophysiology of Primary Diagnosis</td></tr>
<tr><td colspan="2">Myasthenia Gravis (MG) is a medical condition that affects the connection between nerves and muscles due to an autoimmune disorder. Specifically, the condition causes the body's immune system to attack the receptors on muscle cells that receive nerve signals (Dresser et al., 2021). As a result, communication between nerves and muscles becomes disrupted, leading to fluctuating and often progressive weakness in skeletal muscles.</td></tr>
<tr><td>Causes</td><td>Risk Factors (genetic/ethnic/physical)</td></tr>
<tr><td>This condition isn't fully understood, but it's thought to be caused by the immune system attacking (autoimmune disorder) the receptors that help nerves and muscles communicate. The condition may also be associated with abnormalities in the thymus gland, resulting in a disruption of nerve-muscle communication (Johns Hopkins Medicine, 2023). During pregnancy, maternal autoantibodies may be transferred to the fetus and cause temporary myasthenia gravis. Finally, genetics mutations can also cause heritable myasthenia gravis by disrupting the function of proteins involved in nerve-muscle communication.</td><td>Myasthenia gravis is more common in African Americans due to ethnicity-based variation in MuSK antibodies. (Dresser et al., 2021). It is believed that a person's risk of developing the disorder is also influenced by specific antigens known as human leukocyte antigens, which are genetically determined.

Furthermore, smoking, obesity, physical inactivity and an insufficient diet have been found to contribute to a higher risk of developing the disorder (Mayo Foundation for Medical Education and Research, 2023).

Additional general risk factors that increase the likelihood of developing MG include gender and age. Women between the ages of 20 to 30 and men between the ages of 60 to 70 are at higher risk. Moreover, specific genetic markers, including HLA-B8 or DR3, are associated with an increased risk of the disease (Dresser et al., 2021). Additionally, newborns with maternal abnormal antibodies are at risk if they pass through the baby's body through the placenta during pregnancy (Johns Hopkins Medicine, 2023).</td></tr>
</table>

2. What are the patient's signs and symptoms for this diagnosis? How does the diagnosis impact other body systems and what are the possible complications?