gMG AWARENESS ADVANCES ACTION

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MYASTHENIA GRAVIS ESSENTIALS: A GUIDE FOR WOMEN OF REPRODUCTIVE AGE

This guide is for women of reproductive age with myasthenia gravis (MG). The decision to start a family can feel worrying, especially while managing a chronic condition such as MG, but understanding how MG affects your reproductive health and knowing your treatment options can help you feel more confident in your care.

In this guide, you will find information on how MG may affect pregnancy and menstruation, safe treatment options, and key considerations for labor, delivery, and family planning. This guide also includes information about managing MG at every stage of your reproductive journey.

To help you feel supported during appointments with your healthcare team, we have included a **consultation companion** to help you ask the right questions and ensure that you are getting the information you need.

For general information about MG, read **Myasthenia gravis essentials: a guide for adults**.

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What is MG?

MG is a chronic autoimmune disease that causes weakness in the muscles. This weakness is typically caused by an inability of the nerves to transmit signals to the muscles properly. It most commonly impacts the muscles that control eye movements, facial expressions, swallowing, speaking, and breathing.

Most cases are caused by harmful antibodies (substances made by your immune system) that interfere with the communication between nerves and muscles, leading to the weakness experienced in MG.

MG and reproductive health

Women with MG experience many of the same symptoms and challenges as men, but they may face additional difficulties during menstruation and during specific phases of their life, such as pregnancy.

Many women with MG experience a worsening of symptoms just before or during their menstrual periods. This worsening is believed to be related to hormonal fluctuations. Symptoms may worsen during the first few days of menstruation, regardless of menstrual discomfort or pain.

If you notice that your symptoms worsen in the lead-up to or during menstruation, talk to your healthcare provider about ways this can be managed.

MG and family planning

If you have MG and are considering pregnancy, it is natural to have concerns about how the condition might affect both you and your baby. **Speaking with your MG specialist well in advance** gives you the opportunity to review your treatment plan, adjust any medications that may pose risks, and ensure that your symptoms remain well managed throughout pregnancy. You may also wish to see a high-risk maternal-fetal medicine doctor, so that you feel prepared in case complications arise.

For most women with MG, fertility is not significantly affected, and with proper care, most have healthy pregnancies. Every woman's experience with MG during pregnancy is different. Some find that their symptoms remain stable, whereas others may notice fluctuations, particularly in the third trimester or postpartum period. However, if MG is well controlled before pregnancy, the likelihood of stability throughout pregnancy is much higher.

Your healthcare team will work with you to monitor your condition and provide the safest, most effective treatment at every stage.

Treatment during pregnancy

Managing MG during pregnancy involves choosing the right treatments to keep both you and your baby safe. Many MG medications can still be used, although some may need adjustments, and a few should be avoided. The table below provides an overview of common treatments and their considerations during pregnancy. Your healthcare provider will help you navigate these options and find the best plan for you.

Treatment	Considerations during pregnancy
Surgery	
Thymectomy	Thymectomy should be planned before conception or postponed until after delivery.
Medications	
Acetylcholinesterase inhibitors	Oral pyridostigmine is the preferred first-line treatment for MG during pregnancy and should be taken at the lowest effective dose. However, subcutaneous pyridostigmine is not recommended, as it may cause uterine contractions.
Corticosteroids and other immunosuppressants	Prednisone is the preferred immunosuppressant for MG during pregnancy and is generally suitable when used at the lowest effective dose. If prednisone is ineffective or not well tolerated, azathioprine is considered suitable for use during pregnancy and cyclosporine can be considered. However, certain immunosuppressants – such as mycophenolate mofetil, methotrexate, and cyclophosphamide – can cause birth defects and should be avoided by pregnant women and those who may become pregnant. These therapies should be stopped 3 months before conception.
Targeted treatments	
Complement inhibitors	These therapies are not currently approved for use during pregnancy.
Neonatal Fc receptor (FcRn) inhibitors	
B-cell-directed treatments	These therapies are not currently approved for use during pregnancy. Rituximab should be stopped 3 months before conception.
Plasma exchange and immunoglobulin treatment	
Intravenous immunoglobulin	These treatments may be used if a quick response is needed during pregnancy.
Plasma exchange (plasmapheresis)	

If you are thinking about starting a family, it is important to talk to your doctor before making any changes to your medication. Some MG treatments may need to be adjusted for pregnancy, but suddenly stopping or reducing medication on your own could lead to worsening symptoms or complications.

Labor and delivery

Here are some considerations for labor and delivery:

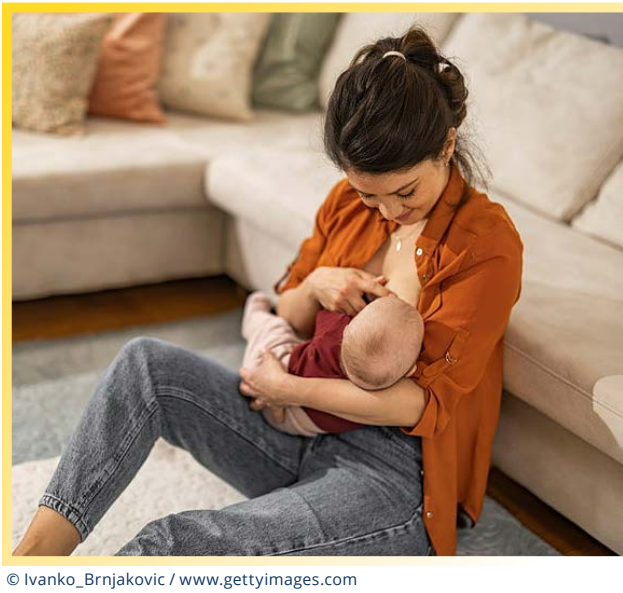
- Most pregnant women with MG can have a **typical vaginal delivery**, and this is generally encouraged. It is important to carefully choose where you will give birth. If possible, giving birth where your obstetric and MG care teams can work together at the same hospital will provide the best support.
- To ensure the safest delivery for both you and your baby, it is recommended that you give birth in a hospital with a **neonatal intensive care unit (NICU)**, where specialists can provide extra support if needed.
- Before labor, consulting with an anesthesiologist is recommended. In most cases, regional anesthesia (such as an epidural, which is an injection into your back) is preferred for pain relief during vaginal delivery.
- Magnesium sulfate, often used to treat preeclampsia (high blood pressure during pregnancy and after labor), should generally be avoided, as it can worsen MG symptoms and potentially trigger a myasthenic crisis. However, in some cases, its use may be approved by your treating MG neurologist based on your individual clinical situation, and so it is important to discuss this early in your pregnancy.
- Your baby may need some extra care and monitoring after birth. MG-related antibodies can cross the placenta, and about 10–20% of babies born to mothers with MG may experience **transient neonatal MG** (temporary muscle weakness). Because of this, your newborn will be closely monitored for a few days to check for any breathing or feeding difficulties. If symptoms appear, they are usually **mild** and **resolve on their own** as the antibodies naturally break down.

MG and breastfeeding

Breastfeeding is generally considered safe for mothers with MG, and it is not known to affect their condition. The levels of antibodies passed through breast milk are very small and unlikely to cause harm to your baby.

For medications such as pyridostigmine, prednisone, azathioprine, or monoclonal antibodies (such as rituximab), the levels that transfer into breast milk are very low, making breastfeeding safe for most women with MG.

However, medications that are known to be teratogenic (harmful to the baby), such as mycophenolate mofetil, methotrexate, or cyclophosphamide, should be avoided while breastfeeding. Always talk to your doctor about the best options for you and your baby.



Consultation companion

When managing MG as someone of childbearing age, open communication with your healthcare provider and multidisciplinary team is key. Whether you are planning a pregnancy, currently pregnant, or thinking about future options, asking the right questions helps you understand how MG may affect your health and reproductive choices. Here are some example questions to get you started:

My questions	My answers
How might pregnancy affect my MG symptoms?	
Will I need to change my current treatment plan?	
Are there any medications or supplements I should avoid?	
How can I manage fatigue and muscle weakness during pregnancy?	
Will I need any special care during labor and delivery?	
What should I do if I experience a worsening of symptoms?	
What should I consider when planning for breastfeeding?	
My question	
My question	

Looking for support?

Connecting with others in similar situations can offer valuable advice, comfort, and a sense of community. Patient advocacy groups, such as the following, can provide vital information about MG, and many have platforms or support groups where you can connect with others:

Myasthenia Gravis Foundation of America

https://myasthenia.org/

European Myasthenia Gravis Association

https://www.eumga.eu/

MyAware (UK)

https://www.myaware.org/

Myasthenia Gravis Association

http://www.mgakc.org/

Myasthenia Gravis Society of Canada

www.mgcanada.org

You can also ask your healthcare provider about any local groups you could join.