Maternal Health

Multiple Sclerosis

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Pregnancy is a key consideration in treatment decisions for women with MS who are of childbearing age.

Some women may delay conception due to disease-related pregnancy concerns (e.g., disease stability, societal attitudes, treatment discontinuation).

Average age of onset of MS in the US

Younger 33 years old Older

Pregnancy is a key consideration in treatment decisions for women with MS who are of childbearing age.

MS, multiple sclerosis
The difference in linear trends between groups was statistically significant (p<0.0001)\(^a\)

In recent years, women with MS have had pregnancy rates at least as high as women without MS

This trend may reflect a change in perceptions regarding pregnancy risks in this patient population

Number of women with MS ranged from 36,361 to 58,218; number of women without MS ranged from 735,974 to 1,144,868. Observed in US women with MS in a retrospective administrative claims database study using IQVIA™ Real-World Data Adjudicated Claims data. *Results were adjusted for age, region, payer type, and comorbidity (using Charlson Comorbidity Index). Model assumptions were age = 30 years, region = Midwest, payer = commercial, and Charlson Comorbidity Index score = 0.25 (assumptions approximated the median values). After adjusting results, when comparing women with and without MS, the difference in linear trend was 0.17% increase and 0.15% decrease in per annum pregnancy rates, respectively. MS, multiple sclerosis

Houtchens MK et al. Neurology 2018;91:e1559–69
Effects of pregnancy on MS

Pregnancy is an immunotolerant state; clinical and MRI disease activity is suppressed\(^2\).

Pregnancy is associated with a decreased risk of relapse, compared with the prepregnancy period\(^1,3,4\).

There is no consistent evidence associating pregnancy with worsened long-term disability\(^5\).

80% of patients with MS suffer from fatigue,\(^6\) which can worsen during pregnancy\(^7\).

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**Annualized relapse rate in the year before pregnancy and during pregnancy in women with MS (n=2158)**\(^1,a\)

- **Prepregnancy (months)**: 9-12, 6-9, 3-6, 3
- **Pregnancy trimester**: 1st, 2nd, 3rd

**Adjusted relapse rate (% of women per month):**

- **Prepregnancy**: 1.47
- **Pregnancy**: 0.99

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*Figure from Houtchens MK et al. Neurology 2018;91:e1570–8*

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*Based on data collected from the IQVIA™ Real-World Data Adjudicated Claims PharMetrics Plus Database ("PharMetrics Database") – 2006–2015

MRI, magnetic resonance imaging; MS, multiple sclerosis

The neurological condition of all pregnant patients with MS should ideally be checked every 3 months.


Considerations for pregnancy planning in MS

**Timing of opportunity**
Evaluate disease activity and course before making therapeutic decisions.

**Disease activity**
Disease activity and severity should be considered.

**Stable disease**
Recommended that MS is under control for at least 1 year prior to pregnancy.

**DMD treatment choice**
Treatment choice should align with the woman’s pregnancy plans.

**Pregnancy advice**
Patients with MS should follow the standard advice for all pregnant women.
Family Planning Resource Center

MS and Pregnancy
Questions to Ask Your Doctor.

Planning Ahead
- What medications are okay to take pre-pregnancy?
- Is the medication I am currently taking or my spouse is currently taking okay if I am thinking of getting pregnant? Should I consider discontinuing therapy? If so, when should I stop taking it?
- Are there medications that are safe to take while pregnant? What are the benefits and risks for me and my baby if I continue taking medication?
- Are there any treatments for MS-related sexual dysfunction?

Before Conceiving
- Is my MS well-controlled? Can I do anything to control my MS before I start trying to conceive?
- Do my partner or I need to stop taking certain MS medications prior to trying to conceive?
- How will I manage any relapses before, during, or immediately after pregnancy?
- Would undergoing in-vitro fertilization (IVF) or other assisted reproductive treatment increase my risk for relapses?

Pregnancy
- How frequently should I visit the doctor?
- What type of medical team will I need in place during my pregnancy?
- How can I help make sure my neurologist, primary care physician, and OB/GYN work together to ensure a healthy pregnancy?
- Will MS make it difficult for me to give birth vaginally due to mobility issues or other MS symptoms?
- Under what circumstances would you recommend a patient with MS have a cesarean section (C-section)?
- Does the medication I'm taking put me or my baby at risk for any complications such as low birth weight or injury?
- Is it safe for my baby if I...

Postpartum
- Can I breastfeed? What is the impact on the medication?
- What should I tell my child?
- Would occupational therapy or medication changes be needed?
- How will I manage any relapses?