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Family Planning in Multiple Sclerosis: Enhancing Patient Care

Announcer:
Welcome to ReachMD. This Medical Industry Feature titled, “Family Planning in Multiple Sclerosis: Enhancing Patient Care,” is sponsored by EMD Serono. This program is intended for US healthcare professionals only.

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Here’s your host, Dr. Matt Birnholz.

Dr. Birnholz:
Since multiple sclerosis is most common in women and its clinical onset typically occurs during their childbearing years[1], healthcare professionals should be prepared to help these patients navigate the family-planning process, all while ensuring the successful management of their disease. That’s why, on today’s program, experts in the fields of obstetrics and neurology will explore what we, our patients and their partners may wish to consider.

This is ReachMD, and I’m Dr. Matt Birnholz. Joining me today are Drs. Maria Houtchens and Maria Lopes. Dr. Houtchens is Associate Professor in the Department of Neurology at Brigham and Women’s Hospital of Harvard Medical School and Director of the Women’s Health Program at the Multiple Sclerosis Center. Dr. Maria Lopes is an OB/GYN and former Chief Medical Officer for Magellan Rx Management.

Doctors, thank you both for joining.

Dr. Houtchens:
It’s good to be here. Thank you very much.

Dr. Lopes:
Thank you. Great to be here as well.

Dr. Birnholz:
It’s great to have you both with us! So, Dr. Houtchens, to start us off, can you share some background with us on what we know about MS patients who want to start a family?

Dr. Houtchens:
Yes. So we know that approximately 75% of all patients with multiple sclerosis are women.[2] We know that disease is more prevalent and often is diagnosed at the time of women thinking about starting a family at childbearing age.[3-5] Clinical onset of multiple sclerosis typically occurs right around the third and fourth decade of life.[4,5] It is estimated that approximately one-fifth to one-third of women with MS who deliver a child do so after the disease onset.[1,6,7]

We recently conducted the Retrospective U.S. Administrative Claims Database Study, which indicated that the proportion of women with MS who had a pregnancy had increased in the United States in recent years,[1] which was really good news and probably reflects a certain level of comfort with considering pregnancy and going through pregnancy in the modern era of multiple sclerosis therapeutics.

We wanted to make sure that we can communicate to our patients that maternal MS generally has no significant negative impact on the ability of a woman to conceive, on fetal development, on the ability to carry to term, and doesn't seem to be associated with any long-term negative developmental outcomes in a child.[4] MS does not clearly affect fertility adversely in women with the disease,[5] but there is some data on the decreased ovarian reserve[8,9] and on higher rates of thyroid autoimmunity,[8,10] both of which, at least potentially, can affect fertility.

While paternal multiple sclerosis does not appear to have any specific effects on fetal development, or on the mother's ability to carry to term, or in child development, sexual dysfunction is nonetheless common in both men and women with multiple sclerosis.[4,11,12] MS has been associated with lower semen volume, lower sperm motility, and fewer morphologically normal sperm, all of which could translate to lower fertility.[13]

Although multiple sclerosis is not an inherited disease, there's some genetic predisposition that may increase the risk in the offspring.[4] The risk in offspring for developing multiple sclerosis is generally quoted to be between 2 to 2.5% if one parent or sibling has multiple sclerosis. In the general population, this risk is thought to be 0.13%. So, quite a bit lower.[4] If both parents have multiple sclerosis, there is at least a 30% risk of this disease developing in a child born to such family.[4]

Dr. Birnholz:
And just how important is a strong partnership between patient and healthcare provider in family planning?

Dr. Houtchens:
This partnership is extremely important. Pregnancy counseling is recommended to all women with multiple sclerosis of reproductive age, and this counseling should be performed by a neurologist who treats this patient's multiple sclerosis and certainly is also very helpful when it's performed by reproductive specialists. Discussion should include discontinuation of disease-modifying treatments prior to conception, as well as options for therapeutic management of symptoms and the disease, if that's necessary, throughout the whole pregnancy.[5,14]

Dr. Lopes:
Totally agree with Dr. Houtchens. Education and communication is key. So, education between patients and multidisciplinary team, which includes obstetricians, neurologists, maternal fetal medicine, even lactation specialists should occur as early as possible to really ensure optimal medical care with women with MS.[14]

In addition, where assisted reproductive technology is used, the patient should be cautioned about the potential increase risk of MS exacerbations, and MRI lesion activity should be carefully monitored to allow for intervention as necessary.[14]

Dr. Birnholz:
Now obviously, contraception is an important part of family planning. So, Dr. Lopes, what contraceptive practices do you use with your patients with MS?

Dr. Lopes:
So, there are a number of points to consider, and one of them is that obviously the effectiveness of any contraceptive method is contingent on its inherent effectiveness, but also on how consistent and how correctly the method is used. And so, it is really all about patient choice. There are many, many contraceptive options.[15] Per the CDC, intrauterine devices (IUDs), barrier methods, progestin-only implants and pills, have no restrictions on the use in women with MS.[8,16] Injectables, including medroxyprogesterone acetate may require careful follow-up due to its association with small changes in bone mineral density.[8] Combined hormonal contraceptives are generally acceptable to use, except in women with prolonged immobility due to associated risk of VTE, venous thromboembolism.[8] Now, most studies of oral contraceptives have shown actually protective or neutral associations with MS risk and relapse risks.[17] So, good… good news. Although formal drug interaction studies are limited, many DMTs, disease-modifying therapies, used in MS don't appear to decrease the effectiveness of hormonal contraception, but medications should be reviewed with each clinical visit, as some disease-modifying therapies that are often used for MS may interact with hormonal contraceptive medications and render them less effective.[8]

Dr. Birnholz:
Now, earlier in our discussion, we talked about a variety of things we need to consider when counseling patients with MS who wish to start a family, and fortunately, there are guidelines to help point us in the right direction. For instance, in 2018, the AAN published recommendations on the use of disease-modifying therapies, or DMTs, in adults with multiple sclerosis. So, Dr. Houtchens, based on those guidelines, what are some key concepts we should know regarding the use of DMTs in MS patients who are interested in starting a family?

Dr. Houtchens:
There are certainly several points that are important to consider. The data that we have thus far generally suggests that well-controlled disease—and that includes low annualized relapse rate, appropriate disease control tends to be helpful to assure good intrapartum and postpartum outcomes in outpatients.[19-22] Some data have shown a direct association between disease-modifying treatment use in prepregnancy setting[20] and reduced risk of relapse in the early postpartum period.[19] However, some disease-modifying treatments that we have, have been associated with rebound relapse risk after stopping the treatment in the prepartum phase.[20,23] So, providers need to be careful in considering treatment options and choices in women of reproductive age.

The data on disease-modifying treatment use during pregnancy is quite limited.[24]

Some disease-modifying treatments are explicitly contraindicated during pregnancy, [25,26] while the US prescribing information of other medications state that use in some circumstances may be permitted if clinically warranted.[27,28] For example, pregnancy plans should be discussed with any woman before disease-modifying treatment is initiated. Women should be counseled about reproductive risks and the use of birth control during the use of DMTs.[18] Clinicians should counsel women to stop disease-modifying treatments before planned pregnancy unless the risk of MS activity during pregnancy—or prepregnancy, while they're trying to conceive—outweighs the risk associated with specific disease-modifying treatments intrapartum. Certainly recommended washout guidelines for DMTs should be followed, and patients should be counseled about each individual guidelines as necessary.[4]

Family planning for male patients must also be considered and discussed before initial DMT conversation takes place.[18] An online survey, for approximately 600 patients conducted from September 2016 through June 2017, among patients, who self-reported the diagnosis of clinically isolated syndrome or relapsing-remitting multiple sclerosis demonstrated that there's a significant knowledge gap regarding the ability for disease-modifying treatment to be transmitted to a female partner via semen.[29] And 95% of male and 96% of female respondents were either unsure whether such transmission could occur or indicated that it definitely could not occur.[29]

Disease-modifying treatments present possible risk in pregnancy to our female patients to various degrees.[18] However, every US product label has a section now dedicated to pregnancy and lactation that should be specifically reviewed with patients at the time of treatment initiation.[25-28,30-35] In the postpartum period, patients should be counseled regarding the benefits and risks associated with breastfeeding versus restarting disease-modifying treatment at the end of pregnancy.[5,14]

Dr. Birnholz:
Dr. Lopes, turning back to you, in addition to considerations regarding the DMTs, what are some specific practical considerations that are important to keep in mind for the time periods before, during, and after pregnancy?

Dr. Lopes:
A woman's healthcare provider team should really ensure that she has a good understanding of the considerations that are important in each of the timeframes, so that she knows what to expect and what can be put in place in terms of a treatment plan.[36,37] So, in the prepregnancy period, like all women without MS, women seeking to become pregnant should take prenatal vitamins, folic acid, avoid alcohol, smoking, and ensure that they have good sleep hygiene and a healthy diet.[4,36]

During pregnancy and at birth, since women with MS may have a higher risk for urinary tract infections, monitoring and treatment is important.[36,38] If a relapse occurs, conventional short-term corticosteroids can be considered. In particular, prednisone or methylprednisolone are favored, while dexamethasone should be avoided[4] due to potential for negative effects including miscarriage, congenital malformations, particularly if used in the first trimester.[39] And these medications should really be reserved for acute relapses that substantially impact daily life.[36] Any delivery method or anesthetic choice during delivery is generally acceptable. However, in more disabled patients, it may be necessary to consider assisted vaginal delivery with vacuum extraction or even Cesarean section, if appropriate.[4,40]

After pregnancy, patients should be advised to manage sleep, obtain any needed help with household chores, receive physical therapy as needed, including pelvic floor exercises if required.[5] Now, as patients with MS have increased risk for depression overall, compared to the general population, screening for postpartum depression and possible treatments should be considered.[5,41] The literature does not suggest a negative impact of breastfeeding on relapsed risk.[4] However, data regarding its potential benefit has also been mixed.[14,20,42] Postpartum relapse does not appear to contribute to long-term disability[3], and there's no consistent evidence associating pregnancy with worsened long-term disability.[3] So, that's good news. Conversely, pregnancy and childbirth have actually been linked with longer time from MS onset to unilateral ambulation assistance, which is typically an EDSS of 6.[43-45]

Dr. Birnholz:
Doctors, before we close today's panel discussion, what are the key takeaways you think our audience should keep in mind? And, Dr. Houtchens, why don't you start us off.

Dr. Houtchens:
I think it's very important for us to remember that patients with multiple sclerosis are often very interested in starting a family and to have the opportunity to go through healthy pregnancy and to raise their children. So, we as neurologists, just need to remember that and help them make these decisions.

Dr. Birnholz:
And Dr. Lopes, how about you?

Dr. Lopes:
The importance of a collaborative approach that involves the patient, family members, the healthcare team is important to appropriately manage the risk of disease-modifying therapies, as well as MS exacerbations and improve the overall health status of patients throughout the family planning process.

Dr. Birnholz:
Excellent. Those are all great things for us to keep in mind moving forward. And with that, I want to thank Dr. Houtchens and Dr. Lopes for their time and insights in helping us understand more about the important considerations for family planning in patients with MS. It was great having with you both with us today. Thanks so much.

Dr. Houtchens:
Thank you, it was a pleasure.

Dr. Lopes:
Pleasure to be part of this program.

Announcer:

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