FINDING HOPE WITH OMS
Webinar series
Women’s Health and Living Well with MS
Wednesday, October 20th at 8pm BST

Hosted by

Welcome

Professor Helen Rees-Leahy

Dr Jonathan White

overcomingms.org
Women’s Health and Living Well with MS

• Welcome and introductions
• Why are women more likely to have MS?
• Women’s health: attitudes and experiences
• MS and women’s fertility: pregnancy, breastfeeding, menopause
• Women Living well with OMS
• Q&A
Why are women more likely to develop MS?

• Approximately 3 million people with MS worldwide
  • Overall incidence 1/1000, but varies considerably by country
  • Most common disabling neurological disorder of young adults
  • Most diagnosed in their 20s and 30s

• **MS is three times more common in females** – Why?!
  • *Hormones*?
    • Similar incidence pre-puberty, oestrogen related
  • *Genetics*?
    • S1PR2 gene, controlling blood brain barrier permeability
  • *Environment*?
    • Female obesity rates, vitamin D
Women’s Health: Attitudes and Experiences

• Do we experience MS differently?
• Is our experience of healthcare different?
• #MSexism?
• Outcomes for women with MS?

Jean Martin Charcot first described MS in 1868

Our Bodies, Ourselves published 1970

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MS and Women’s Health - Fertility:

- **MS has no direct effect on female fertility**
  - no need to change contraceptive
- **BUT** it can cause sexual dysfunction:
  - loss of libido
  - vaginal dryness
  - inability to achieve orgasm
  - bladder symptoms
  - fatigue
  - spasticity
  - depression
- No evidence for increased risk of miscarriage
- In IVF: **SHORT (antagonist) protocol is preferred**
MS and Women’s Health - Pregnancy and Breastfeeding:

Pre-pregnancy counselling
- No effect of MS on fertility
- Don’t routinely defer DMT
- Consider effect of exposure in males
- Pregnancy does not affect long-term disability outcomes
- Relapse risk during and after pregnancy

Obstetric management and delivery
- Not automatically a high-risk pregnancy
- Can receive methylprednisolone for relapse management
- Vitamin D
- MS should not influence delivery or analgesia outside disability considerations
- Epidural or diazepam for troublesome spasticity during labour

Post-partum considerations
- Support breastfeeding alongside treatment considerations
- Methylprednisolone not contraindicated in breastfeeding
- Increased risk of post-natal depression

Symptomatic treatments
- Varying data available
- Not all need to be stopped
- Risk/benefit balance on an individual basis

Disease modifying drugs (DMDs)
- More details in figure 2
- Do not interact with OCP
- Some require washout pre-conception
- Consider additional obstetric monitoring

UK Consensus on Pregnancy in Multiple Sclerosis: ABN Guidelines, 2019
# MS and Women’s Health - Pregnancy and DMDs:

<table>
<thead>
<tr>
<th>First line therapies</th>
<th>Highly active therapies</th>
<th>Induction therapies</th>
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<tbody>
<tr>
<td><strong>First line injectables</strong></td>
<td><strong>First line oral</strong></td>
<td><strong>Alemtuzumab</strong></td>
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<tr>
<td><strong>Copaxone/IFN-B preparations</strong></td>
<td><strong>Teriflunomide</strong></td>
<td>• Can try to conceive 4/12 after course of alemtuzumab</td>
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<tr>
<td>• Safe to continue until conception</td>
<td>• Teratogenic animal studies</td>
<td>• Monitor for autoimmune disease during pregnancy</td>
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<td>• No evidence of harm to fetus</td>
<td>• Potential exposure in females via transfer in seminal fluid</td>
<td>• Irradiated blood products</td>
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<td>• If stopped, 3/12 to reach full efficacy post-partum</td>
<td>2 years washout or accelerated elimination</td>
<td>• Do not give when breastfeeding</td>
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<tr>
<td>• Benefits of breastfeeding on treatment outweigh risks</td>
<td>• Unplanned pregnancies: accelerated elimination and high risk</td>
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<tr>
<td><strong>Dimethyl Fumarate</strong></td>
<td><strong>Natalizumab</strong></td>
<td><strong>Fingolimod</strong></td>
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<td>• Consider effect of GI upset on OCP</td>
<td>• High risk of relapse/rebound if stopped</td>
<td>• Limited data</td>
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<tr>
<td>• Limited data in pregnancy</td>
<td>• No specific pattern of birth defects</td>
<td>2/12 washout</td>
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<tr>
<td>• Breastfeeding contraindicated</td>
<td>• Consider treating in pregnancy; last dose c34/40</td>
<td>Unplanned pregnancy: immediately stop; high risk</td>
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<tr>
<td><strong>Ocrelizumab</strong></td>
<td><strong>Cladribine</strong></td>
<td><strong>Breastfeeding contraindicated</strong></td>
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<tr>
<td>• Avoid pregnancy for 12/12</td>
<td>• Teratogenic in M and F</td>
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<tr>
<td>• Unplanned pregnancy: immediately stop; high risk</td>
<td>• Avoid pregnancy for 6/12 after treatment course</td>
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MS and Women’s Health - Menopause:

- Average age is 51: “absence of periods for > 1 year”
  - Symptoms last ~4 years, (10 years in 10%)

- Significant cross-over of MS and menopausal symptoms
  - Sleep, mood, cognition, bladder function

- Conflicting evidence for reduced RR and MS disability progression
  “Inflamm-aging”, oestrogen deficiency

https://doi.org/10.3389/fneur.2021.554375

Effects of Menopause in Women With Multiple Sclerosis: An Evidence-Based Review

By Dr Jonathan White MBChB MRCOG
08 Jan 2020
MS and Women’s Health - HRT:

- **HRT**: very effective at treating vasomotor and GU symptoms
  - Generally safe – small increased risk of breast & ovarian cancers, blood clots
  - Beneficial in MS?
  - Anti-depressants, clonidine, topical oestrogens

- **Natural HRT**: soy, black cohosh, red clover, evening primrose (limited evidence)
Women Living Well with OMS

- Women = 80% of responders to OMS Community Engagement Survey

- OMS program: ‘Pleasure, Purpose, Practice’ (Rachael Hunter)

- Challenges for women in following OMS program

- OMS supports all women with MS