SWITCHING AND DISCONTINUATION OF DISEASE-MODIFYING TREATMENTS IN MULTIPLE SCLEROSIS PATIENTS: EXPERIENCE IN AN UNIVERSITY HOSPITAL

S. Oprea1, S. Negres2
1Pharmacy Department, Bucharest University Emergency Hospital, 2Clinical Pharmacy Department, University of Medicine and Pharmacy, Bucharest, Romania

Background and Objective

Many approved for manage MS
Varying mechanism of action, routes of administration, dosing schedule, efficacy and side-effect profile
Divided into first-line or second line
No universal guidelines exist for switching therapies

Disease modifying therapy (DMT)

Purpose

To describe the reasons that brought about treatment modification with reference to: switch, temporary interruption or permanent discontinuation.

Methods

• Observational, retrospective study in a university hospital from December 2019 to December 2020, including patients with SMRR.
• Data was collected from reviewing patient clinical records and variables analyzed were:
  ✓ Average age at diagnosis
  ✓ Sex
  ✓ DMT (before and after switch)
  ✓ Reason for changing treatment
  ✓ Duration of initial therapy
  ✓ Number of changes

Results

<table>
<thead>
<tr>
<th>Number of MS patients</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients with any treatment modification</td>
<td>106 (69W)</td>
</tr>
<tr>
<td>1 switch - 82</td>
<td></td>
</tr>
<tr>
<td>2 (or more) switches - 24</td>
<td></td>
</tr>
<tr>
<td>Number of patients with permanent discontinuation</td>
<td>0</td>
</tr>
<tr>
<td>Average age at diagnosis (Standard deviation)</td>
<td>39,9 years (9,47)</td>
</tr>
<tr>
<td>Number of patients with temporary interruption</td>
<td>8 (4 for pregnancy, 4 for other personal reasons)</td>
</tr>
<tr>
<td>Evolution to progressive form - SMSP (permanent disability)</td>
<td>9</td>
</tr>
</tbody>
</table>

Reasons for treatment switch

- Interferon related flu-like symptoms
- Multifocal leukoencephalopathy
- Treatment intolerance
- Injection-site reaction

Most remarkable reasons for treatments intolerance

Conclusion

Modification between first-line DMT or escalation to higher potency therapies was a common occurrence during our study. Most patients were treated with first-line drugs before and after the modifications. Lack of efficacy remains the main driving force behind switching. These results confirmed that some patients can experiencing disease activity despite DMT and necessitate escalating to a more potent treatment for preventing worsening of disability. Determining which DMT is best for which patient and when to switch remains a major challenge and patient's personal preferences should be considered.

For further information contact: Ph.D. Simona Oprea email: simomirela@gmail.com