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**MANAGEMENT OF URINARY DISORDERS IN MULTIPLE SCLEROSIS PATIENTS: OUR EXPERIENCE VS. UNITED-KINGDOM (UK) CONSENSUS.**

**Hypothesis / aims of study**
Seventy five percent of the patients with Multiple Sclerosis (MS) have lower urinary tract dysfunction (LUTD) and this dysfunction is often underestimated. That clinical condition creates higher morbidity and poor quality of life. Few recommendations or consensus exist in literature about clinical follow up of neurogenic bladder [1-2]. Management of the patients is less described. Our objective was to retrospectively compare the management of urinary dysfunction of MS patients in our department with UK consensus [3].

**Study design, materials and methods**
Our population comprised of 69 patients MS referred for evaluation of LUTD. They had urodynamic testing and evaluation of EDSS (Expanded Disability Status Scale). Our decision of management was compared to that proposed in the UK consensus. Figure: UK consensus showing bladder management options with progression of disabilities [3].

Comparison of EDSS with UK consensus led to:

- **EDSS < 6** = antimuscarinic (AM) and/or desmopressin (DDAVP);
- **6≤EDSS<7** = AM + Clean Intermittent Self Catheterization (CISC) or buzzer +/- DDAVP or Botulinum Toxin A (BoNT/A);
- **7≤EDSS<8** = AM + CISC or indwelling catheter (IDC) or BoNT/A;
- **EDSS≥8** = IDC.

**Results**
In the study population, ratio women/men was 40/29, mean age 52 y [21-83y], mean EDSS 4.9 [1-9]. Management proposed to the patient was compared to UK consensus. Results are described in the table.

<table>
<thead>
<tr>
<th>EDSS</th>
<th>No patients</th>
<th>UK Consensus</th>
<th>Our management</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6</td>
<td>39</td>
<td>AM +/- DDAVP</td>
<td>9 AM +/- TENS or BoNT/A ; 17 CISC +/- (AM or Alpha (-) or BoNT/A); 7 Alpha (-); 3 pelvic floor rehabilitation; 2 TENS; 1 cranberry</td>
</tr>
<tr>
<td>6-6,5</td>
<td>14</td>
<td>AM + CISC or buzzer +/- DDAVP or BoNT/A</td>
<td>4 CISC +/- (AM or BoNT/A); 3 TENS; 3 intermittent hetero-catheterization; 2 AM + alpha (-); 2 no or same treatment.</td>
</tr>
<tr>
<td>7-7,5</td>
<td>8</td>
<td>AM + CISC or IDC or BoNT/A</td>
<td>4 CISC +/- (AM, BoNT/A or Alpha (-)); 2 AM; 1 Alpha (-); 1 BoNT/A (striated sphincter).</td>
</tr>
<tr>
<td>≥8</td>
<td>8</td>
<td>IDC</td>
<td>4 urinary diversion (Bricker); 2 CISC; 2 multidisciplinary approaches</td>
</tr>
</tbody>
</table>
Interpretation of results

Different guidelines have been proposed in Europe (France, Italy, Germany and Turkey) for management of LUTD in MS [1-2-3]. Most of them are based on the existence of post-void residual and on the consequences on upper urinary tract (infections, calculi, hydronephrosis). Urodynamics is useful to detect risk factors (high detrusor pressure during voiding, detrusor sphincter dyssynergia, detrusor overactivity...).

UK consensus is the first approach which gives relationship between disabilities and management. We introduce a parallelism between EDSS and UK consensus.

Difference of management, compared to UK consensus, is notable in high and low EDSS: for EDSS<6, CISD are learning; for EDSS≥8, no IDC. In medial EDSS value, the two managements are similar.

Concluding message

We propose a parallelism between EDSS and UK consensus; this may be useful to simplify management of neurogenic bladder in patients with MS.

References


Disclosures

Funding: None Clinical Trial: No Subjects: HUMAN Ethics not Req'd: It involved retrospective of urodynamic studies from a database Helsinki: Yes Informed Consent: Yes