

Urinary retention in multiple sclerosis (MS)



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Introduction:

- Up to 80 percent of people with MS (PwMS) are affected by lower urinary tract (LUT) dysfunction (Al Dandan et al, 2020).
- MS lesions in the central nervous system (CNS) that regulate the bladder and urinary sphincters can obstruct or slow down nerve signal transmission. Symptoms as a result of this include impaired urine storage, emptying difficulties or both and can include urinary incontinence, voiding difficulties and urinary retention (UR) (Hill, 2021).
- Untreated bladder problems in MS can lead to a variety of short and long term complications (National Institute for Health and Care Excellence (NICE), 2012).
- Understanding what might be causing bladder problems requires assessment, based on symptoms, to then direct appropriate management and treatment (NICE, 2012).

Case history:

- 68 year old lady - Secondary Progressive Multiple Sclerosis (SPMS)
- Expanded Disability Status Scale (EDSS) – 6.5
- Past Medical History (PMH) – Overactive Bladder (OAB)
- Medication – Solifenacin 10mg

Presenting complaint:

- 3 week history of significant urinary incontinence on standing
- Difficulty in passing urine
- Discomfort in lower abdomen

Assessment:

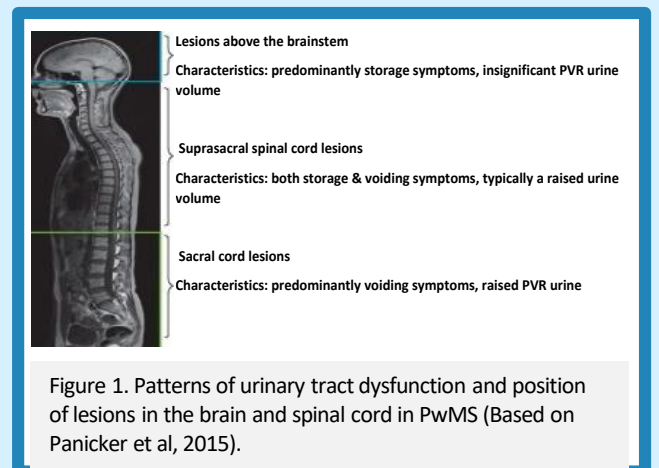
- Dipstick urinalysis – negative, bloods for renal function checked
- Bladder ultrasound scan - post void residual (PVR) - 872mls, 761mls, 800mls
- Impression - Urinary Retention (UR)

Plan:

- Referred to Urology team for catheterisation
- Stop Solifenacin
- Refer to continence service

Discussion:

- LUT dysfunction is impacted by the location of lesions in the spinal cord or brain (See figure 1), which in turn affects how the body interprets signals travelling from the brain to the bladder. Symptoms patients may suffer are typically influenced by the lesion's location (Sadiq and Brucker, 2015).
- A detailed continence assessment is essential to provide evidence of any bladder issues (Thomas et al, 2022a).
- Evidence based care pathways are considered an effective tool for health professionals (Thomas et al, 2022b).
- UK consensus bladder guidelines are available to aid optimum care and treatment (Bradley et al, 2022).
- An essential investigation to confirm impaired voiding is the measurement of PVR (NICE, 2012).
- Catheterisation is the intervention most often used to manage incomplete bladder emptying and UR (Tornic and Panicker, 2018).
- Clean intermittent self-catheterisation (CISC) is viewed by many as the preferred first line method, and is considered to be the gold standard treatment (Blok et al, 2022; Thomas et al, 2022a).
- CISC can be challenging (Phe et al, 2016).
- Bladder dysfunction can have distressing effects on an individual, physically, psychologically, psychosocially and have a negative impact on quality of life (QOL) (NICE, 2012; Lakin et al, 2021).
- The National Health Service (NHS) incurs significant costs as a result of LUT dysfunction contributing significantly to emergency hospital admissions in PwMS (Thomas et al, 2022a).
- A proactive approach is essential.
- The MS Specialist Nurse (MSSN) is in a privileged position to develop a trusted professional rapport with the patient and be the known first point of contact (Young and Bradley, 2021; NICE, 2022).



- Empathetic listening and effective communication is key for open discussion.
- Prompt initial assessment, referral for specialist input and timely intervention by the MSSN promotes an integrated approach to care resulting in optimal outcomes (Newsome et al, 2017).

Outcomes:

- Performing CISC independently.
- Continence achieved.
- Quality of life (QOL) regained.

Conclusion/Recommendations:

- Urinary dysfunction in PwMS is common, troublesome and greatly impacts QOL.
- Managing bladder dysfunction is important for long-term renal health, infection prevention, personal independence and general QOL.
- Experienced multidisciplinary services guided by clinical care pathways are recommended to achieve the best possible treatment and care (Thomas et al, 2022a).
- CISC remains the favoured treatment in managing incomplete bladder emptying.
- A comprehensive review of care at least once a year including the bladder is recommended (NICE, 2022).
- Adopting the use of bladder diary's routinely in practice is deemed beneficial.
- The MSSN is in a key position to open communications, provide specialist advice, co-ordinate timely referrals and liaise closely with the wider teams in order to achieve best possible patient outcomes.

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