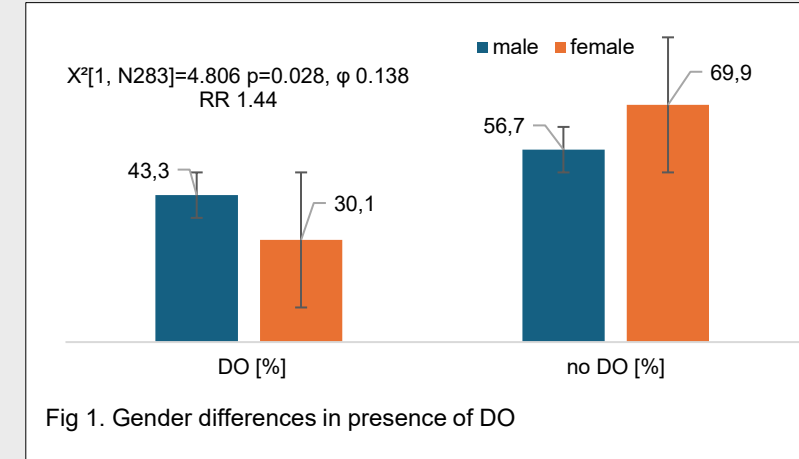




Aim of this study

to investigate gender-specific differences in urodynamic findings in PwMS as these have not been addressed in diagnostic algorithms

Methods

Retrospective multicentre study of 283 urodynamics in PwMS. Following urodynamic findings were assessed and compared between the sexes:

Storage:

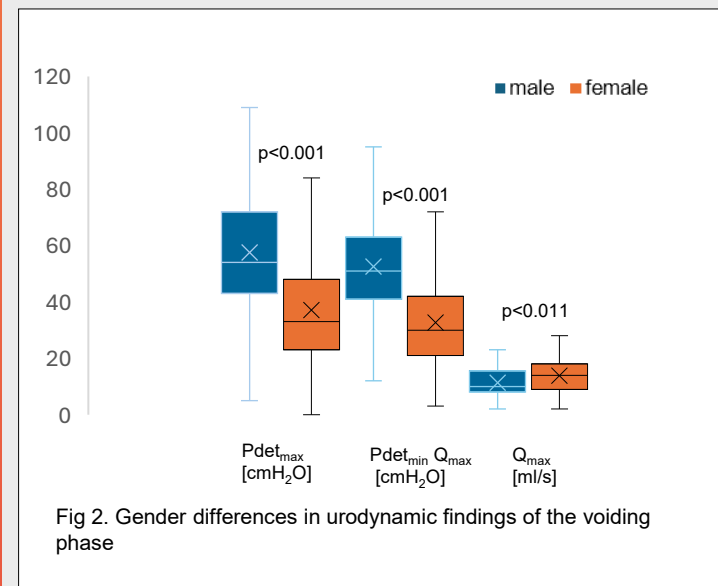
- Sensation (FDV/SDV)
- MCBC
- Presence of DO
- Compliance

Voiding:

- voided volume
- presence of DSD
- Q_{max}
- P_{det_min} Q_{max}
- P_{det_max}

Results

Beside the presence of DO (Fig. 1)) significant differences are found in the voiding phase for Q_{max}, P_{det_min} Q_{max}, and P_{det_max} (Fig. 2) between the genders. Statistical modeling using multiple linear regression with age, EDSS, and Course of MS revealed no significant effects on gender differences.



Conclusion

Gender differences - as well as the absence of differences - may be influenced by non-neurogenic changes in the urinary tract (e.g., BOO, genital descent). Similarly, the increased incidence of DO in men may be a consequence of BOO.

Non-neurogenic differences between the genders and their effects on urinary tract function need to be studied more in detail to precise diagnostic algorithms for PwMS.

Compl bladder compliance
 BOO Bladder outlet obstruction
 DO Detrusoroveractivity
 FDV/SDV first/strong desire to void
 MCBC maximum cystometric bladder capacity
 P_{det_max} maximum detrusor pressure
 P_{det_min} Q_{max} minimum detrusor pressure at Q_{max}
 PwMS people with Multiple Sclerosis
 Q_{max} maximum urine flow

NLUTD in People with MS -

Gender Differences in Urodynamic Findings:

- voiding parameters
- presence of DO
- no other storage parameters

Age, EDSS, and disease course have no influence.

Jaekel A.¹, Pluemacher K.², Kirschner-Hermanns R.³, Knuepfer S.¹

¹ Clinic for Urology, Neuro-Urology Section, University Hospital Bonn and Johanniter Clinic Godeshoehe, Bonn Germany

² Clinic for Urology, University Hospital Schleswig- Holstein, Campus Kiel

³ Clinic for Urology, Neuro-Urology Section, University Hospital Bonn, (ret.)