

Introduction

- Multiple Sclerosis (MS) is the most frequent cause of non-traumatic neurogenic lower urinary tract dysfunction (NLUTD). For MS patients NLUTD not only leads to increasing risk for the upper urinary tract, but also seriously affects their quality of life (QoL), since it has been described that urinary problems have a major psychological impact and are among the most socially disabling consequences of MS
- In a previous study we found a relationship between recurrent urinary tract infections and lower urinary tract dysfunction (LUTD) in patients with MS (1).
- In this study we hypothesize that QoL of these patients may be affected by LUTD due to their NLUTD. Consequently the aim of our study is to investigate the relationship between QoL and LUTD.



Figure 1. Urodynamic equipment.

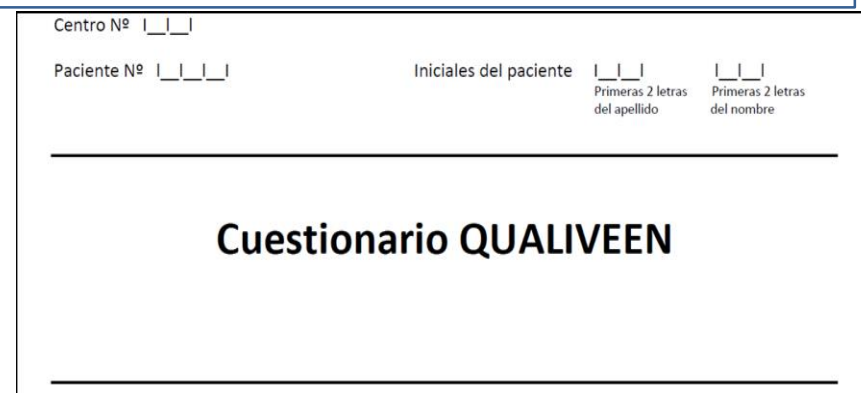


Figure 2. Qualiveen questionnaire.

Methods and Materials

Design. Cross sectional study between September 2017 and December 2018.

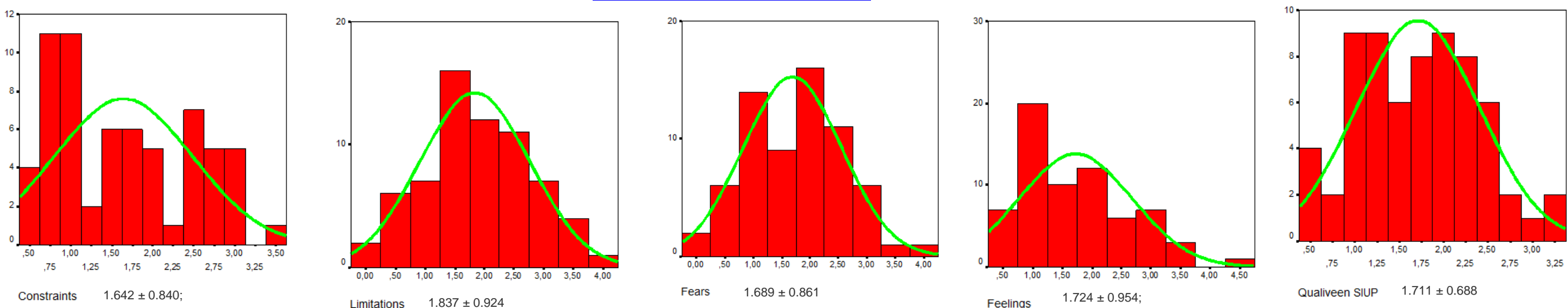
Patients 66: 25 men and 41 women aged $50 \pm 9, 6$ years (mean \pm standard deviation) **Inclusion criteria:** male and female patients over 18 years of age and diagnosis according to McDonald Revised criteria. **Exclusion criteria:** previous pelvic surgery, active urinary tract infection or presence of LUTD secondary to causes other than MS such as urogenital prolapse in women, benign prostatic hyperplasia, primary bladder neck obstruction, urethral stricture or other neurological diseases.

Methods All patients completed the Qualiveen questionnaire (Spanish version) and were submitted to a urodynamic study in accordance with the specifications of ICS and the guidelines of Good Urodynamic Practice.

Statistical analysis. t-test to compare the means and Pearson correlation coefficient (r). Data were tested for normal distribution using the Kolmogorov-Smirnov test. Statistical significance was set at $P < 0.05$.

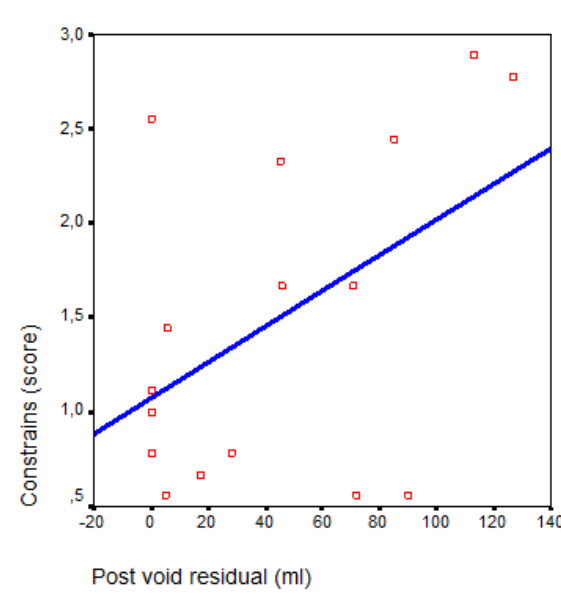
Results

Descriptive statistics

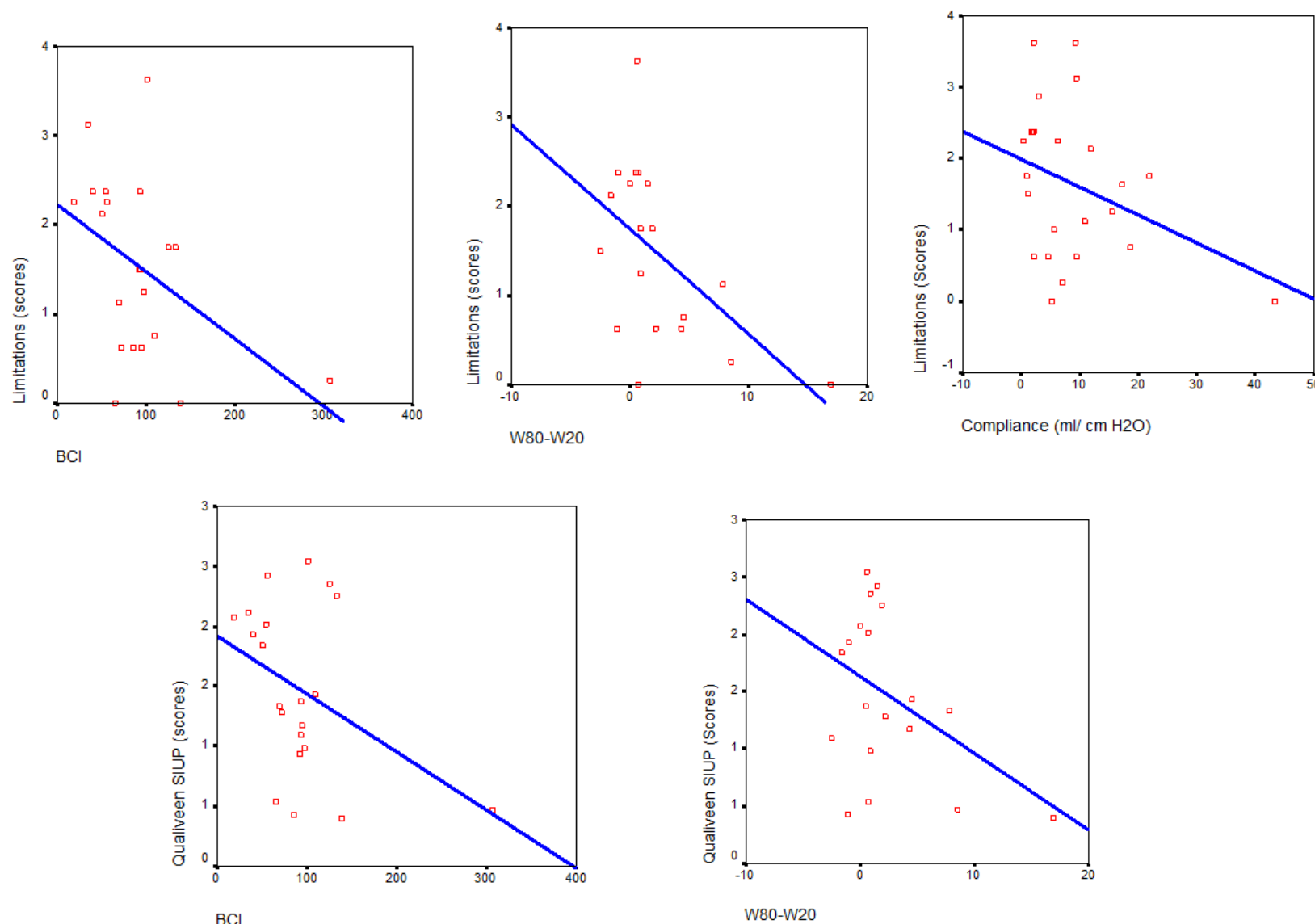


Inferential statistics

Men

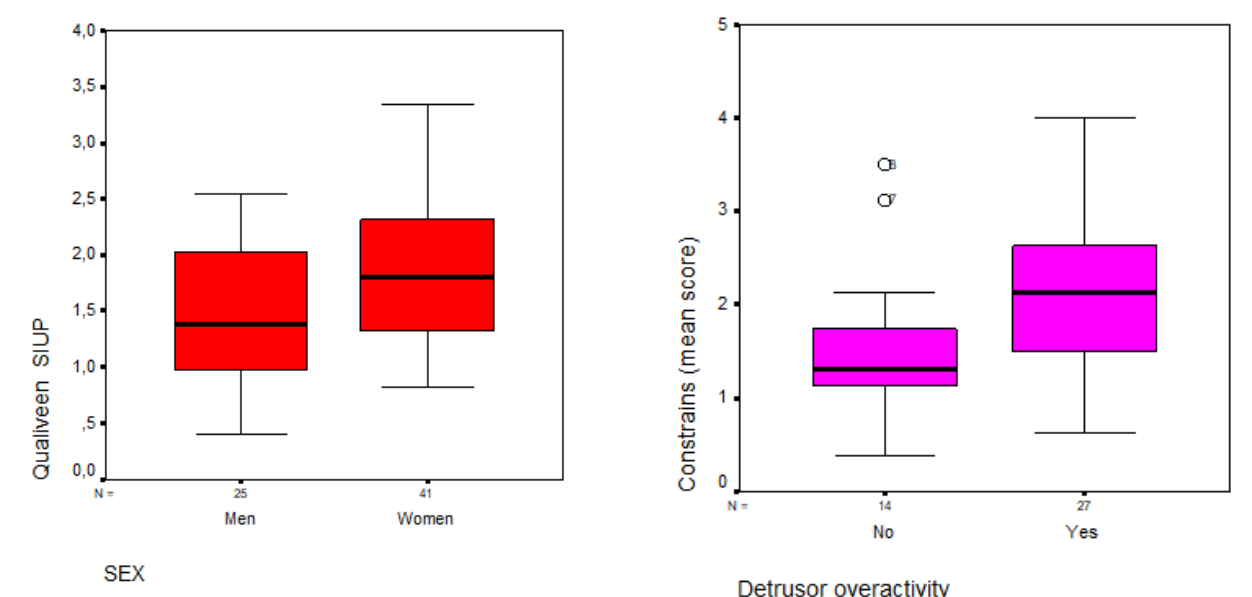


Men showed a direct relationship between post void residual in uroflowmetry and Constrains



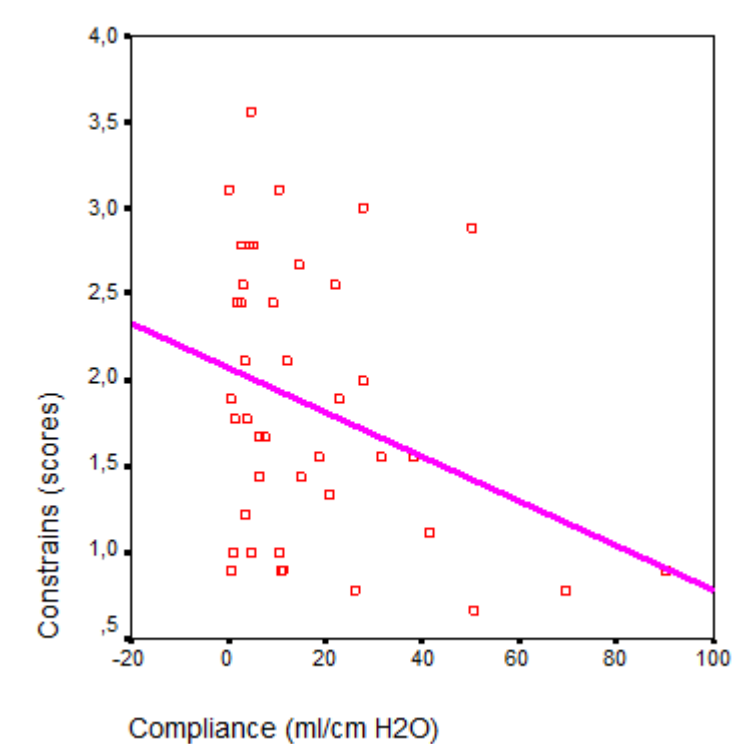
An inverse relationship between bladder compliance (BC) and Bladder contractility Index (BCI), W80W20 parameter and Limitations and between BCI and W80W20 and Qualiveen SIUP

Women



Women had significantly worse scores than men regarding Constrains, Fears and Qualiveen SIUP.

women with detrusor overactivity (DO), showed a significantly worse score in Constrains that those without DO



An inverse relationship between BC and Constrains.

Conclusions

- The results confirm our hypothesis that LUTD influences QoL in these patients.
- However, this influence was different between male and female patients:
 - In men LUTD of voiding phase, specifically detrusor contractility affect QoL
 - In women LUTD of filling phase specifically detrusor overactivity affect QoL
 - In both sexes affectation of compliance worsens QoL but in different Qualiveen items.

References

1.-Castro-Díaz D M, Vírseda-Chamorro M, Salinas-Casado M, Méndez-Rubio S, Esteban-Fuertes M2, Moreno-Sierra J. Clinical and urodynamic risk factors for recurrent urinary tract infections in patients with multiple sclerosis. ICS Meeting. Abstract 505. Philadelphia, 2018.