Prospective cross-sectional study to evaluate the presence of Lower urinary tract symptoms in Rheumatoid arthritis female patients

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Abstract

Purpose: To assess the presence of lower urinary tract symptoms (LUTS) in Rheumatoid Arthritis (RA). Detailed assessment of LUTS and it's impact on QoL in RA patients has been evaluated. Factors that cause or exacerbate LUTS in RA were also analyzed in order to clarify related triggering variables.

Patients and methods: It is a prospective and cross-sectional study. Female patients with RA were included. Demographics and clinical data, Bristol Female Lower Urinary Tract Symptoms questionnaire (BFLUTS), Disease Activity Score 28 (DAS28) to assess RA disease activity were all collected. A correlation has been made between all variables to assess factors that promote LUTS in RA and also the impact on the Quality of life (QoL).

Results: Eighty-nine patients were enrolled in the study. Overactive bladder (OAB) syndrome was the most prevalent LUTS (Frequency, urgency, nocturia and urgency incontinence were found in 65.2%, 59.6%, 56.2%, and 37.7% respectively). Intermittency (15.7%) were the most voiding symptoms. Stress incontinence was another prevalent problem 40.4% of patients. The quality of life (QoL) was affected in 27 (30%) patients secondary to LUTS in RA. Body mass index (BMI) was positively and significantly correlated to the presence of storage symptoms ($p<0.01$) and also to the total BFLUTS ($p=0.018$). BFLUTS subdomains and total score were positively and significantly correlated to poor QoL. The correlation between BFLUTS QoL is found to be ($p<0.01$) with storage symptoms, ($p<0.01$) with voiding symptoms and ($p<0.01$) with incontinence ($p<0.01$). Disease duration, the presence of DM, smoking and coffee intake were not significantly correlated to BFLUS or QoL. No significant correlation was found between DAS28 and BFLUTS or QoL related to LUTS.

Conclusions: LUTS is a prominent and significant disability that directly affect QoL in RA. BMI is an independent factor that is linked to LUTS in RA patients.