

# ANALYZING UROFLOWMETRY OUTCOMES FOR PATIENT AFTER RADIATION THERAPY FOR PROSTATE CANCER

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## Background and Aims

Prostate cancer's (PC) local treatment includes radical prostatectomy and radiotherapy (RT) that has some impact on genito-urinary system despite of the important advances that had been made in techniques of RT. Some patients may have long-term urinary side effects such as increased urinary frequency, urgency, urinary incontinence and dysuria...These symptoms may impact significantly patient's quality of life

## Methods

retrospective study including 33 patients who underwent radiotherapy for prostate cancer. All patients had completed radiotherapy at least 12 months before uroflowmetry evaluation to analyse the effect of late complications related to RT on voiding. We evaluated lower urinary tract symptoms (LUTS) using Urinary Symptom Profile (USP), 3-day frequency-volume charts (FVC), uroflowmetry (UFM) and post-void residual urine volume (PVR) measurement.

## Results

The average age was 69.45 years. The evaluation of LUTS was done after an average of 22 months after finishing radiotherapy. 72.7% had radical prostatectomy prior to the radiotherapy. 45.4% had hormonotherapy and 36.3% had chemotherapy. About lower urinary tract symptoms, 63.6% had urgency urinary incontinence, 54.5% stress urinary incontinence and 81.8% dysuria. Using USP, stress urinary incontinence subscore was 7/9, overactive bladder subscore 14/21 and dysuria subscore was 5/9. FVC showed increased urinary frequency (average number of daytime voids >10 and nocturnal voids > 2) and an average voided volume of 139.2 ml

## Conclusion

Despite the effectiveness of radiotherapy, it can cause damages associated with urinary complications that have impact on patient's quality of life and be sometimes life threatening to the patient. Regular follow-up allow to early detect radiation complications. Uroflowmetry is an indispensable test for patients with LUTS. It can provide objective and quantitative information to understand symptoms

**Keywords:** Prostate cancer, uroflowmetry LUTS