

ANALYSIS OF URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY.

Hypothesis / aims of study

The aim of this study was to identify and to classify urinary incontinent(UI) patients after radical prostatectomy(RP) in order to weigh how important these leakage was.

Study design, materials and methods

1259 patients underwent RP for localised prostate cancer T1-T2 between 1990 and 2011. Incontinence status was explored during follow-up consultations. A phone interview was performed to 294 incontinent patients, having filled the ICIQ-SF questionnaire 279(94.9%).

Mean age of the incontinent group was 65 years (± 6.55)¹, a mean body mass index of 27.2 kg/m² (± 3.6), PSA median of 8.85ng/ml (± 11.6), mean prostate volume 42.3cc (± 27.8). 200(68%)² patients have a biopsy Gleason score of 6 or lower and 42(14.3%) Gleason score 8 or higher. According to D'Amico classification system 45(15.3%) patients were at low risk, 181(61.6%) were at intermediate risk and 68(23.1%) were at high risk. 250(85%) received a radical retropubic prostatectomy and 44(15%) radical laparoscopic prostatectomy. 105 (35.7%) patients had positive margins, 35 (11.8%) were pT3b and 144 (49) had a pathologic Gleason score 6 or lower and 60(20.5%) Gleason score 8 or higher. 54 (18.4%) patients received neoadjuvant radiotherapy.

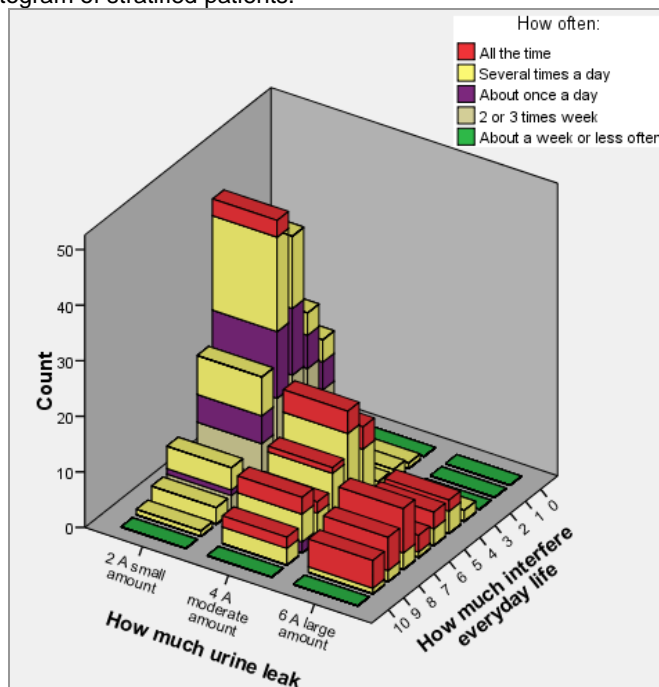
Results

On table 1 result of questionnaire and each frequency are shown.

Table 1. Summary of questionnaire answers.

Table 2. Histogram of stratified patients.

ICI Q SF	11.1	(± 4.03) ¹
<u>How often do you leak urine?</u>		
How often		
About a week or less often	17	(5.78%) ²
2 or 3 times a day	49	(16.66%)
About once a day	49	(16.66%)
Several times a day	118	(40.13%)
All the time	46	(15.65%)
<u>How much urine do you usually leak?</u>		
A small amount	165	(56.12%)
A moderate amount	71	(24.15%)
A large amount	43	(14.73%)
<u>How much does leaking urine interfere with your everyday life?</u>		
0-10	4.53	(± 2.1)



The chance of leakage was also recorded. Leakage with exercise was referred by 118(42.3%), when coughing or sneezing by 8 (2.86%), all the time 35(12.5%), 40(14.4%) when they have finished urinating, 22(7.9%) when they were asleep, and no obvious reason by 52(18.6%).

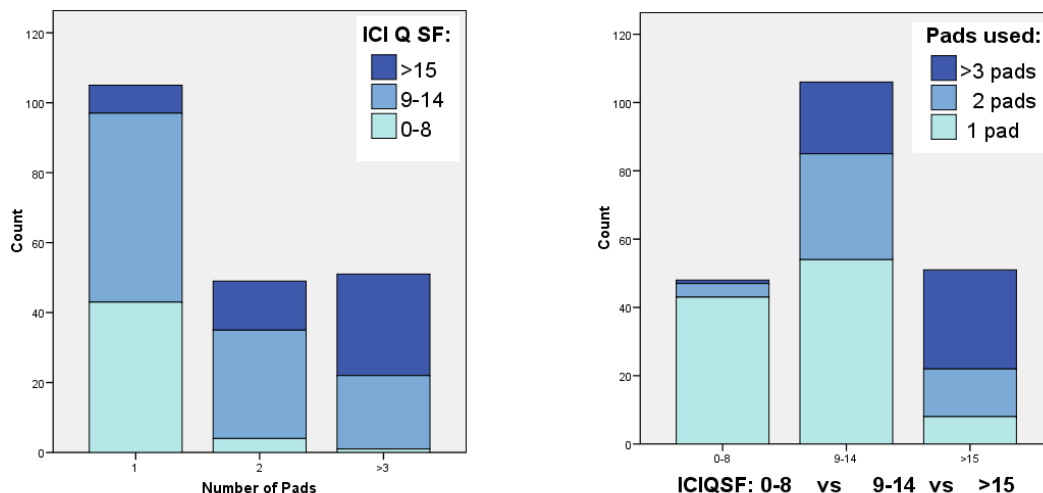
A mean of 1.88(±1.24) pads were used by 207 patients. But 78 (27.4%) patients do not really use any pad. A correlation of $r=0.624$ ($p<0.000$) was observed between total ICIQSF and number of pads. According to the pad type, 144 patients (50.5%) use pad (sanitary napkins) and 63 (22.1%) diapers. Total ICIQ-SF [10.85(±3.74) vs 13.65(±3.6)] and number of pads [1.71(±1.1) vs 2.41(±1.3)] were significantly different by type of pad ($p<0.001$). All clinicopathologic features were analysed without finding any difference between all possible incontinence groups, while other features demonstrated differences. Age and interference in everyday life score showed a mild downward trend ($r=0.077$), with the best cut-off point at 68 years old [4.71(±2.2) vs 4.22(±3.6)] $p=0.058$. According to BMI number of pads used between normal (<25 kg/m²) and overweight patients (>25 kg/m²) interestingly found that normal weight patients use more pads [2.25(±1.4) vs 1.71(±1.1)] $p=0.016$. A total of 54(18.4%) patients received external radiotherapy, 10 reported a worsening of their UI symptoms. ICIQ-SF results of patients who received radiotherapy were worse [12.46(±4.2) vs 10.78(±3.9)] $p=0.008$. Only 13(4.4%) received surgery for UI: 6 (2%) urethral sling, and 7(2.4%) urinary sphincter.

1. Mean/median (standard deviation)
2. Number (percentage)

Interpretation of results

In the present RP series, 294(23.3%) patients suffer from any urine leakage but 78(27.4%) do not use any pad. Urine leakage can be considered as urinary stress incontinence in 64 patients and continuous urinary incontinence in 17 patients. A classification for distributing uniformly UI patients was proposed according to ICIQ-SF results in mild (0 to 8 score), moderate (9-14 score) and severe (more than 15) , and to number of pads in 1 pad, 2 pads or 3 or more pads. The great majority of incontinent use one or two pads and score mild or moderate on ICIQ-SF, and those who score mild or moderate use 1 pad, as we can see on the following histogram

Table 3. Histograms with ICIQ-SF/pads classification.



Concluding message

A typical patient faces a small amount of urine leak triggered by stress, interferes slightly with his normal activity almost every day and demands one pad per day. No clinicopathologic features influence the severity of incontinence. Validated incontinence questionnaires are useful tools to understand the importance of post-prostatectomy incontinence. A classification based on ICIQ-SF and number of pads used appears to be the most completed.

Disclosures

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