

# Bladder dysfunction after pelvic cancer treatment

*Lotta Renström Koskela*

♂ - 1956

6 weeks ago surgery for rectal cancer with a low anterior resection and direct anastomosis.

Problems voiding postoperatively, the catheter was removed after two weeks.

At follow-up visit 8 weeks later for pathology report the patient mentions that he has increasing problems with frequency and now also urinary leakage.

Datum: / 20		
Tidpunkt (kl)	Mängd (dl)	
06.30	2,0	
07.45	1,0	
09.10	1,0	
10.30	0,5	
12.00	1,5	
13.45	1,0	
14.50	1,0	
16.05	1,5	
17.35	1,0	
19.15	1,0	
20.30	1,5	
22.00	1,5	
01.10	1,0	
04.00	1,5	
06.20	2,0	

# Voiding diary and residual urine

Frequency 14  
 Total volume 1700 ml  
 Max volume 200 ml  
 Average volume 125 ml  
 Nocturia 2  
 Night time volume 450 ml (26%)



**750 ml**

# Hypotonic bladder dysfunction

Problems to empty the bladder due to weak detrusor contraction

- Increasing residual
- Decreasing functional capacity

Different catheter solutions

- Clean intermittent catheterization (CIC)
- Suprapubic Catheter
- Catheter á demeure

Straining

Double voiding

# ♂ - 1951

Surgery for prostate cancer 1 years ago, RARP.

After catheter removal he experienced a substantial amount of leakage which has decreased.

He has urgency, frequency and nycturia.

He leaks several times every day following urgency

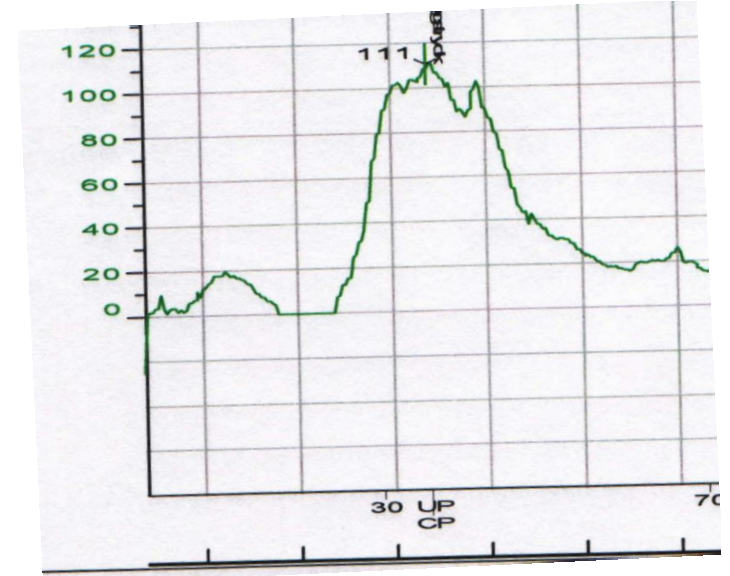
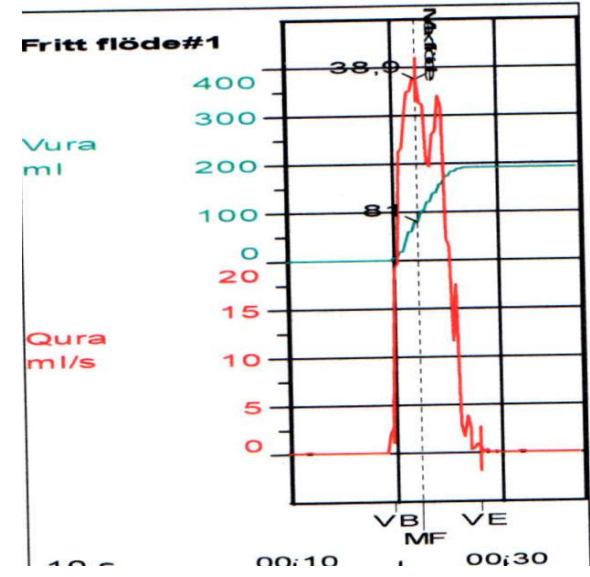
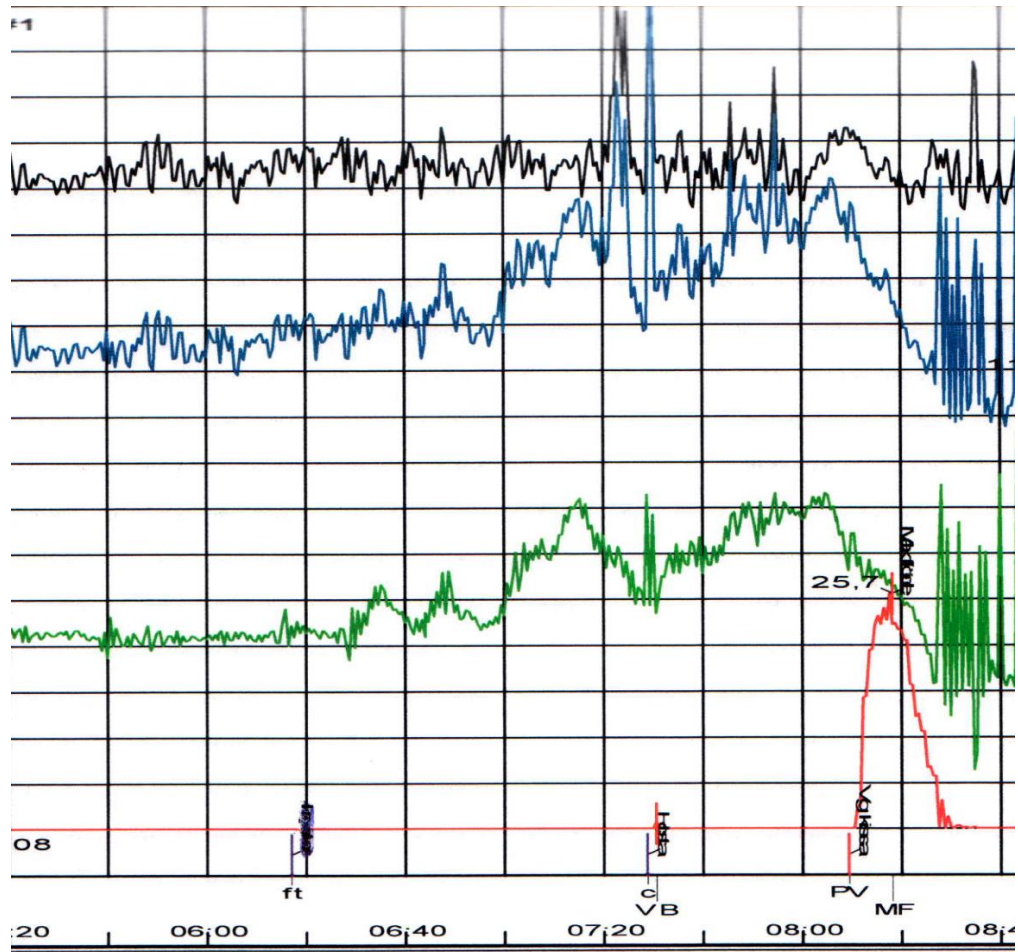
24h PWT shows a leakage of 86 g

Voiding diary with a max capacity of 230 ml, no residual urine

ICIQ-SF with 15/21, 7 in bother score. Leaks during night, before he reaches the toilet and for no obvious reason.

Cystoscopy with normal sphincter, positive elevation test, normal bladder

# ♂ - 1951



♂ - 1947

Surgery for prostate cancer 4 years ago, RARP.

No immediate post operative urinary leakage.

Three years ago the patient had a minor stroke, still experience some weakness in his left foot and hand. After this he started to experience urge and a mild urinary leakage.

Two years ago PSA relapse and salvage radiotherapy. Now he has an increasing urinary leakage.

Feels that he leaks for no reason. Must go up at night so not to leak.

He has tried Duloxetine without any obvious effect.

♂ - 1947

24h PWT shows a urinary leakage of 145g

Voiding diary with a frequency of 13, total amount of urine 1540ml and a maximum capacity of 185ml

No residual urine

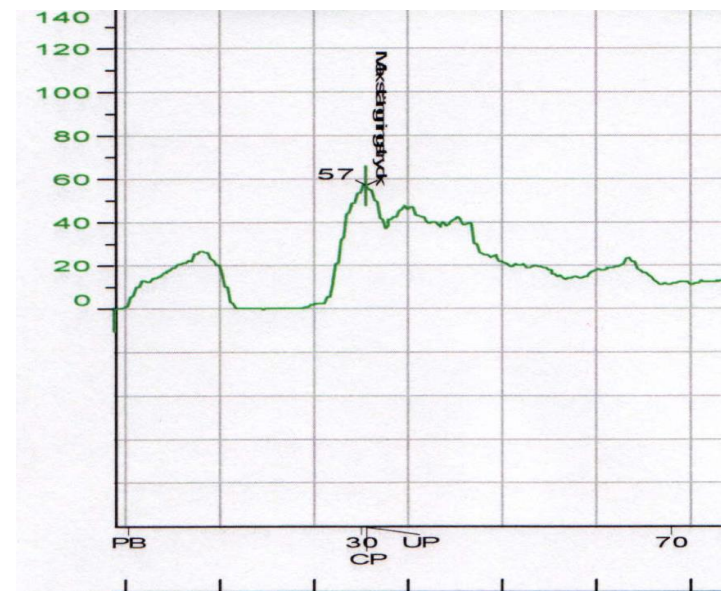
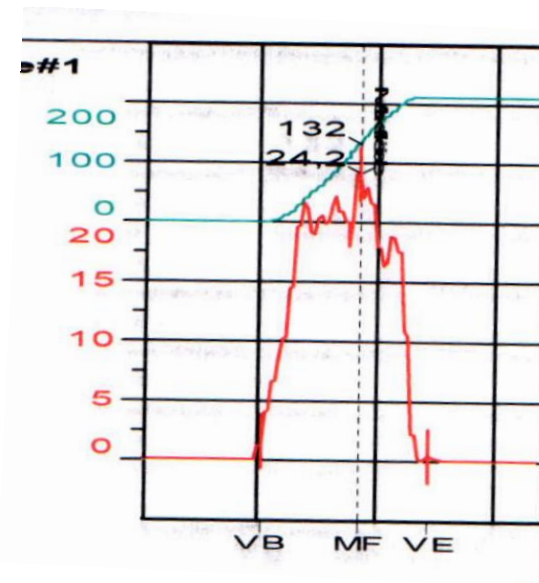
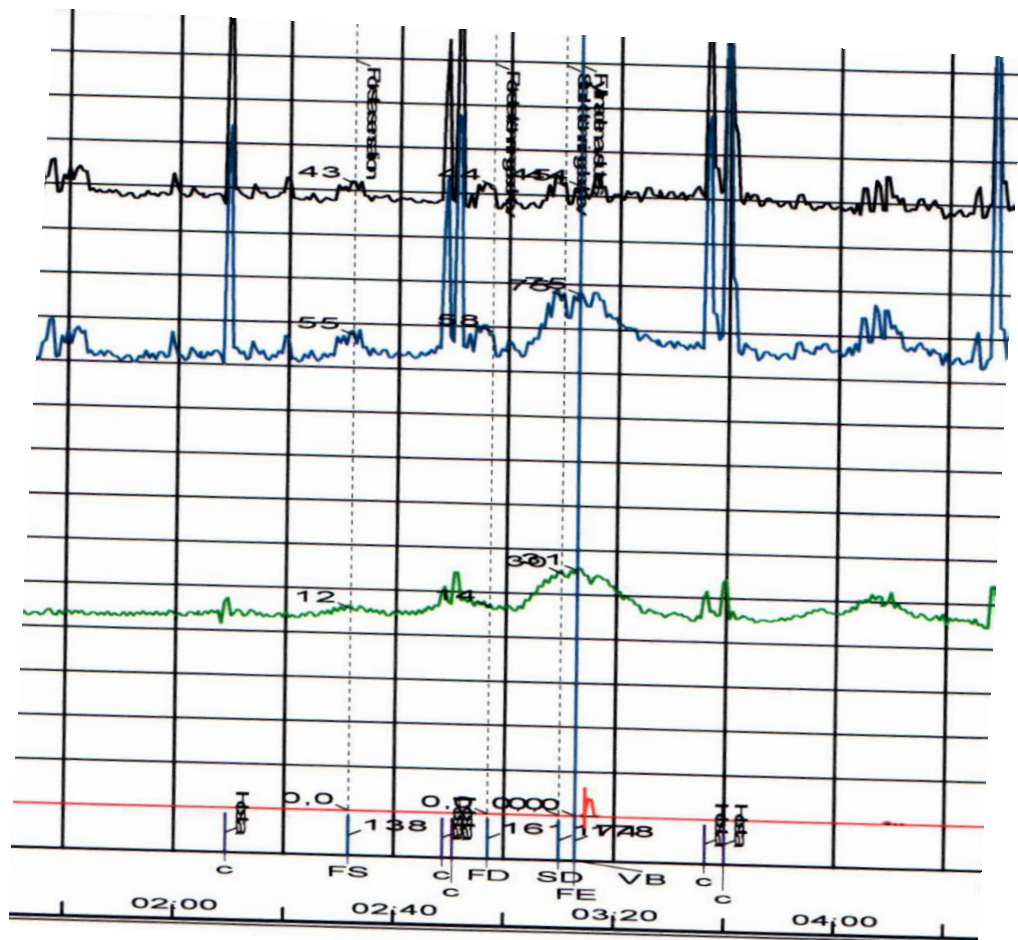
ICIQ-SF 19/21, with a bother score of 9

He leaks during sleep, for no obvious reason and on his way to the toilet. He also leaks when lifting heavy.

Cystoscopy with normal urethra, positive elevation test, bladder with mild telangiectasia



# ♂ - 1947



# OAB vs Radiation cystitis

Previous pelvic radiation excludes OAB

In radiation cystitis the patient may experience urgency and frequency caused by

- sensory sensitivity of the bladder
- Bladder outlet obstruction
- low compliance bladder
- detrusor over activity