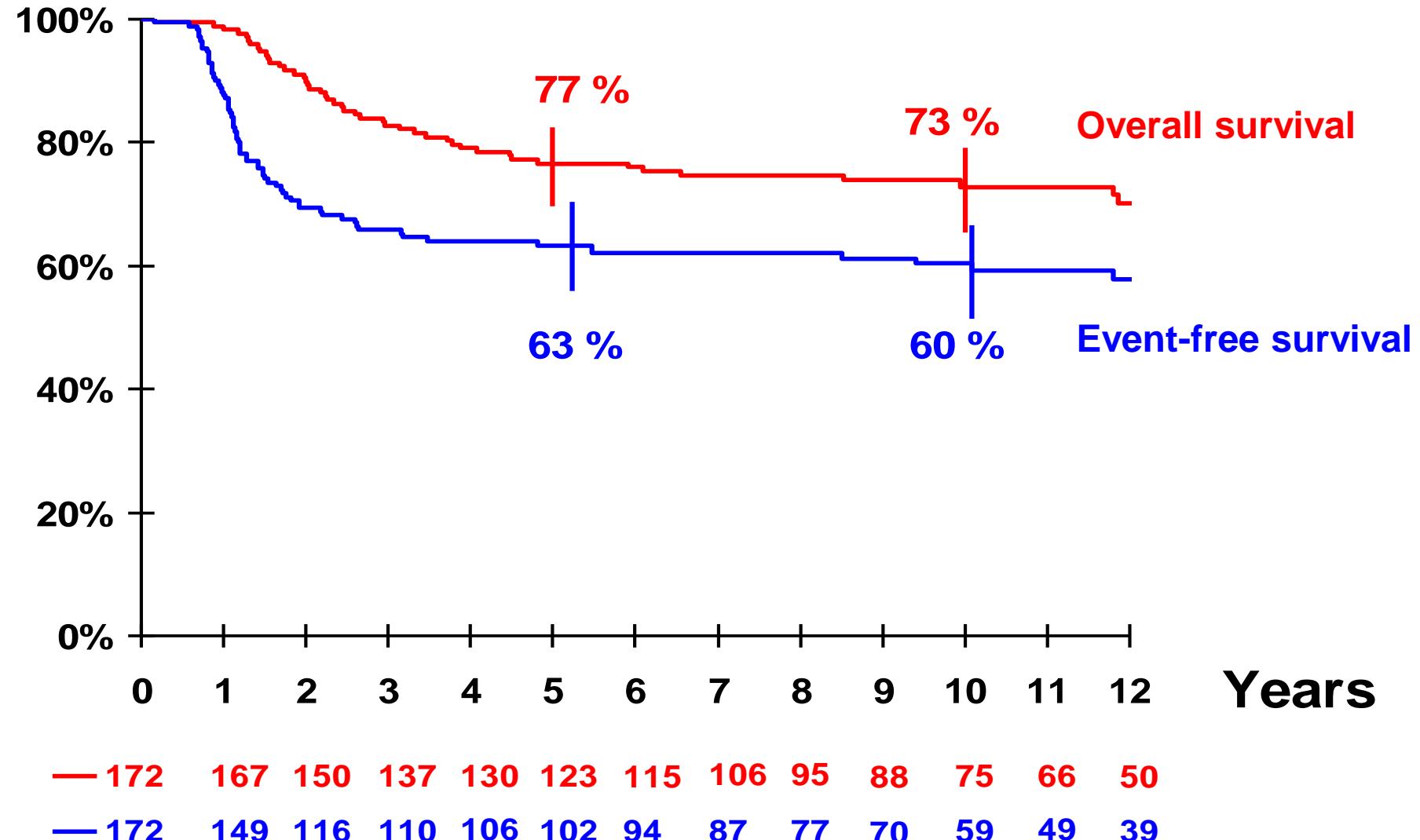


Improvement in local treatment for bladder-prostate rhabdomyosarcoma through 3 consecutive SIOP studies (MMT 84, 89 and 95)

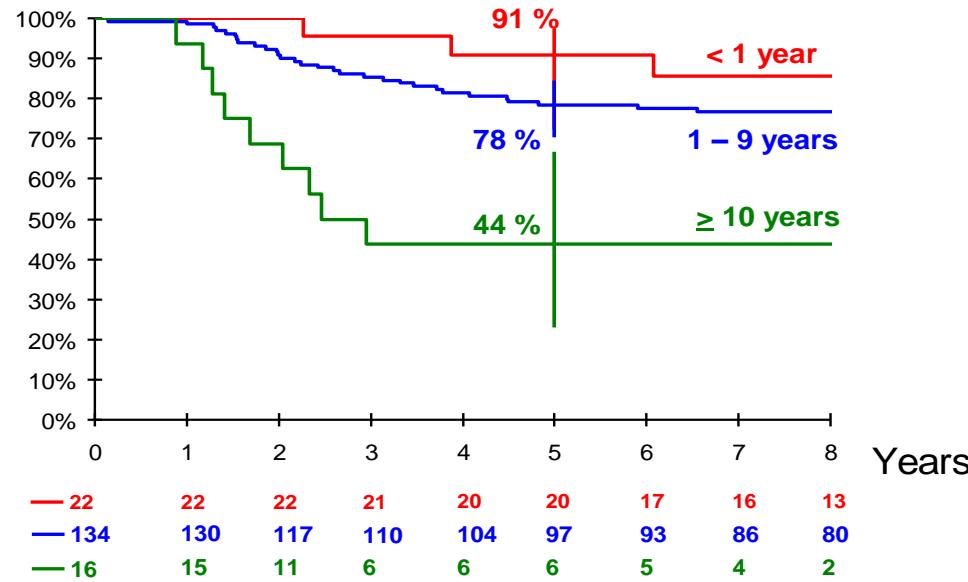
***H Martelli, G Audry, M Jenney, T Rogers, A Rey,
C Haie-Meder, M Gaze, O Oberlin, MCG Stevens
For the SIOP MMT Committee***

MMT 84, 89 and 95 studies

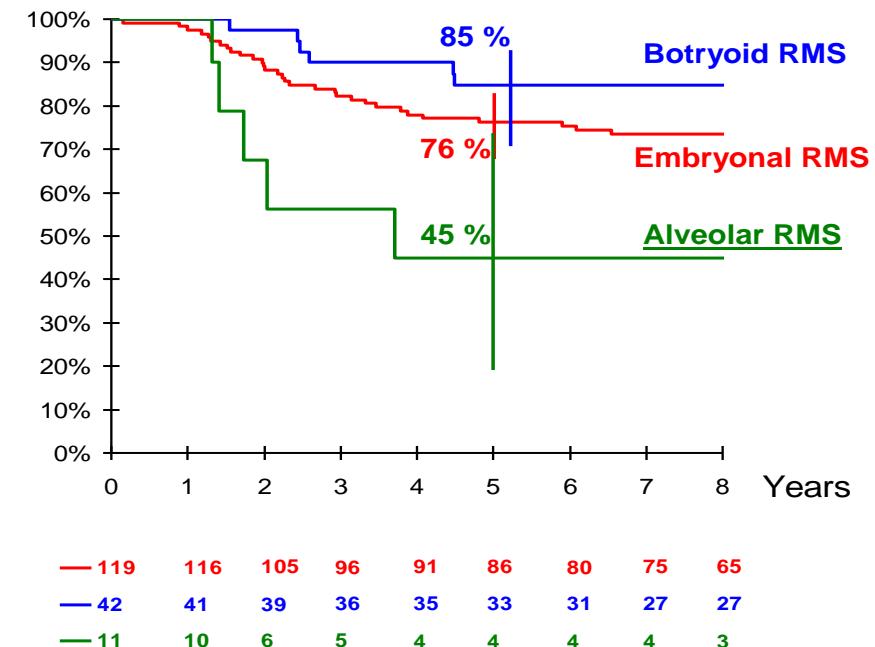
- From 1984 to 2004
- 172 children: 138 boys (80%), 34 girls
- Median age: 2.5 yrs (2 mths - 17.8 yrs)
- Median follow up: 11.4 years (3 mths - 22 yrs)



Prognostic factors on multivariate analysis



Age > 10 yrs



Alveolar histology

Population

- **T size > 5cm : 112 pts (65%)**
- **Node positive : 15 pts (9%)**
- **Alveolar histology : 11 pts (6%)**

- **IRS I: 2 pts (partial cystectomy)**
- **IRS II: 12 pts**
- **IRS III: 158 pts (92%)**

Primary site

- **Bladder: 87 pts (51%)**
- **Prostate: 26 pts (15%)**
- **Bladder-prostate: 59 pts (34%)**

119 survivors

- **100 in first complete remission**
- **19 in second or subsequent CR after relapse**
- **More than 5 years of follow up**

Burden of local treatment

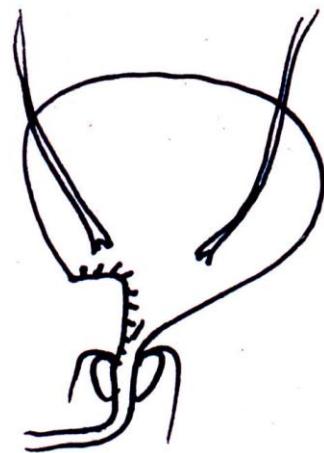
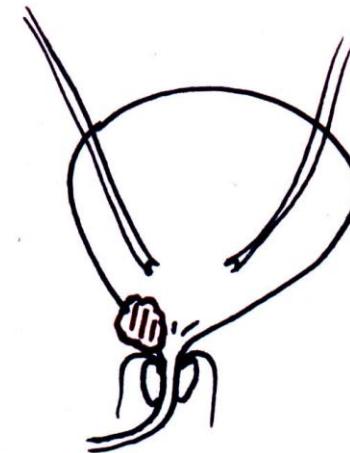
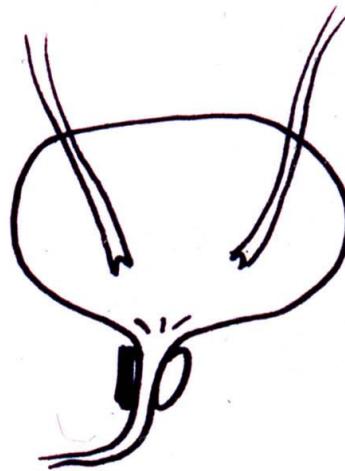
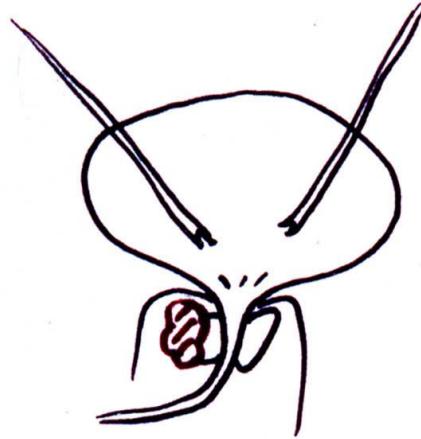
- **Significant**
 - Total cystectomy/prostatectomy/both
 - External beam radiotherapy
- **Not significant**
 - No surgery (only biopsy)
 - Conservative surgery (partial cystectomy or partial prostatectomy with urethra preservation)
 - brachytherapy

Significant local treatment :

60 pts (50 %)

- **18 EBRT (14 after conservative surgery)**
- **42 radical surgery**
 - **13 total cystectomy**
 - **11 total prostatectomy**
 - **18 cysto-prostatectomy**

Not significant surgery



Partial prostatectomy

+ Brachytherapy

Partial cystectomy

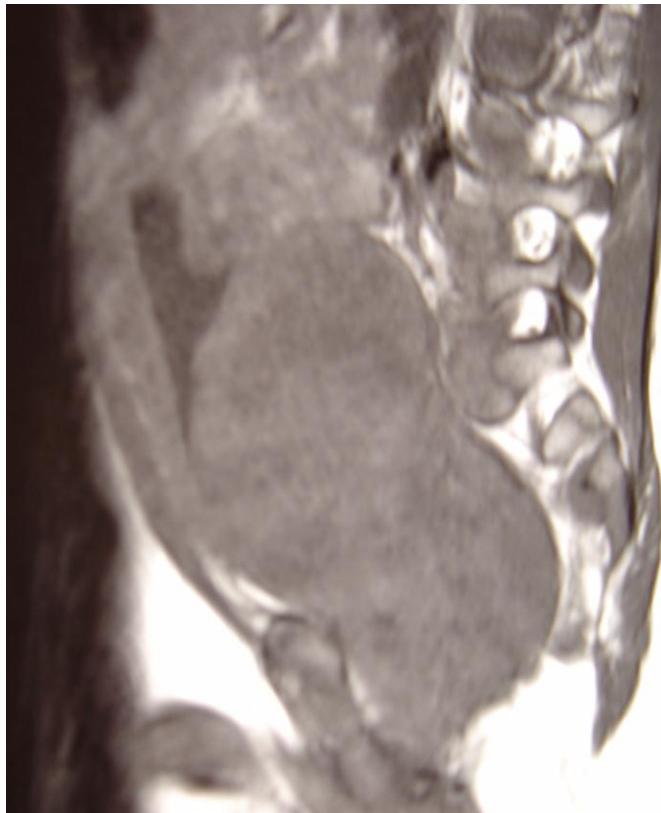
Not significant local treatment

59 pts (50%)

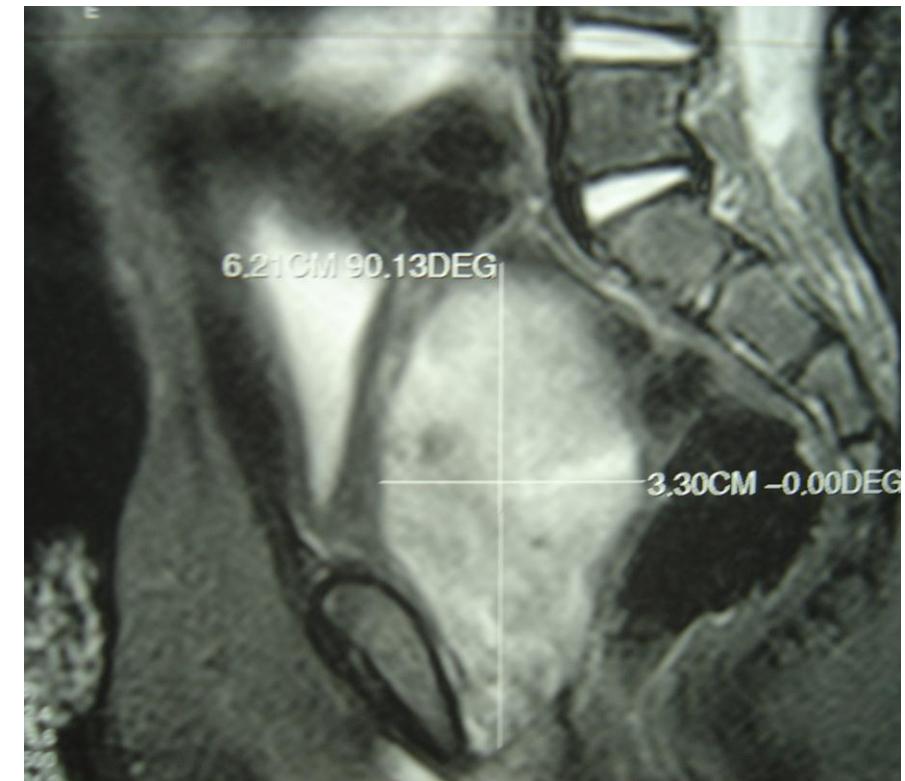
- 10 pts: only biopsy
- 1 pt: partial cystectomy at diagnosis
- 45 pts: conservative surgery
 - 14 with brachytherapy
- 3 pts: brachytherapy only

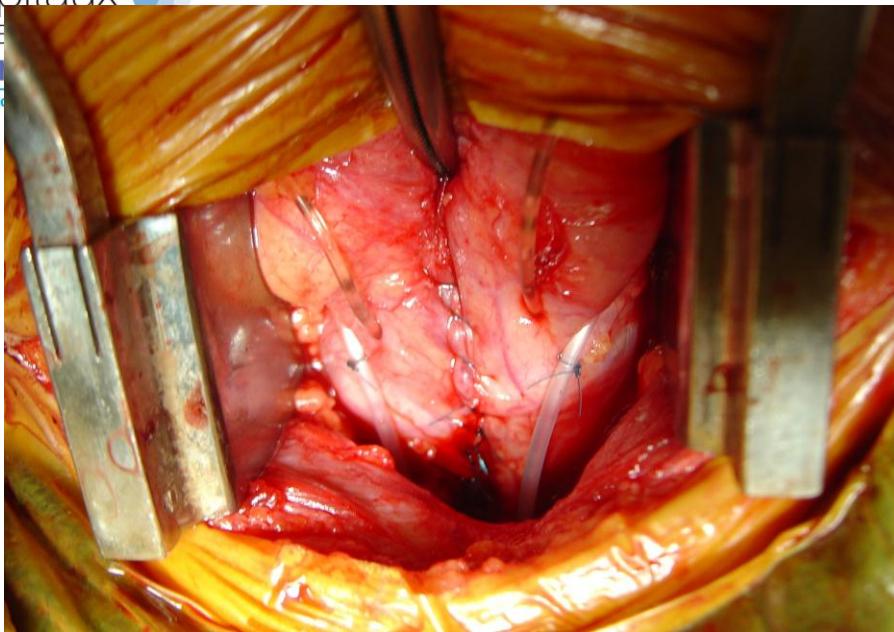
Prostate RMS

At diagnosis



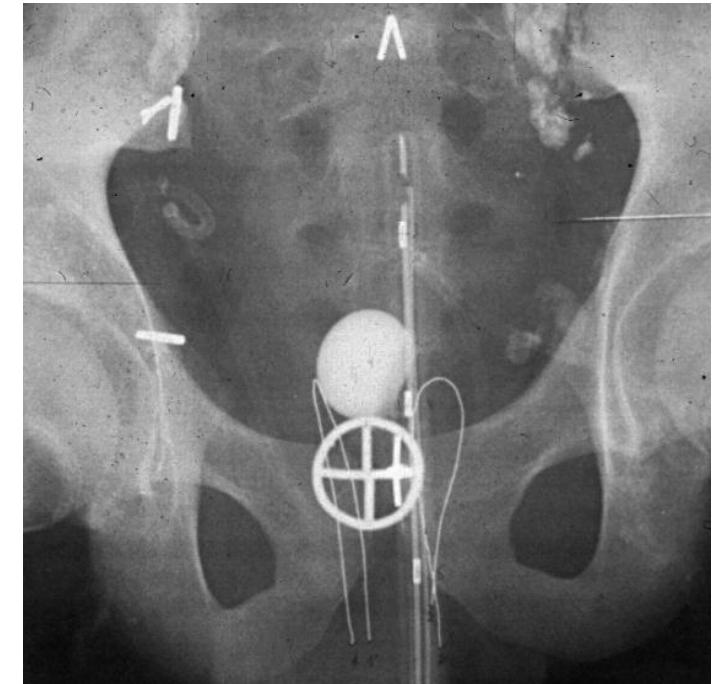
After 7 courses of CT





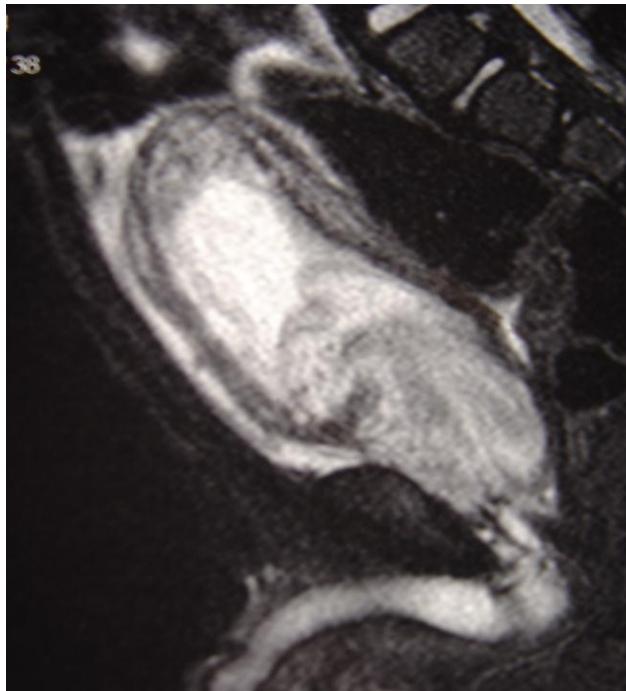
Left prostatectomy + brachytherapy

- Iridium 192
- 2 loops encompassing the prostate
- low dose rate (5-7 days)
- 60 Gy



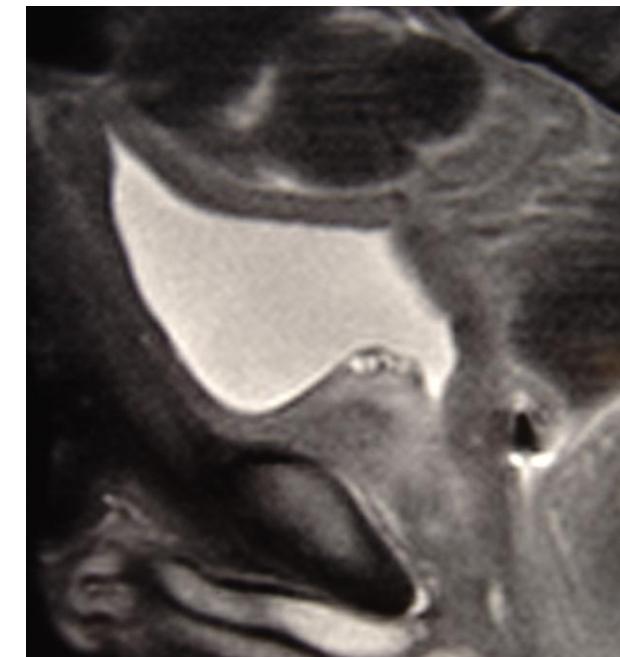
2 year-old boy - Bladder neck RMS

At diagnosis

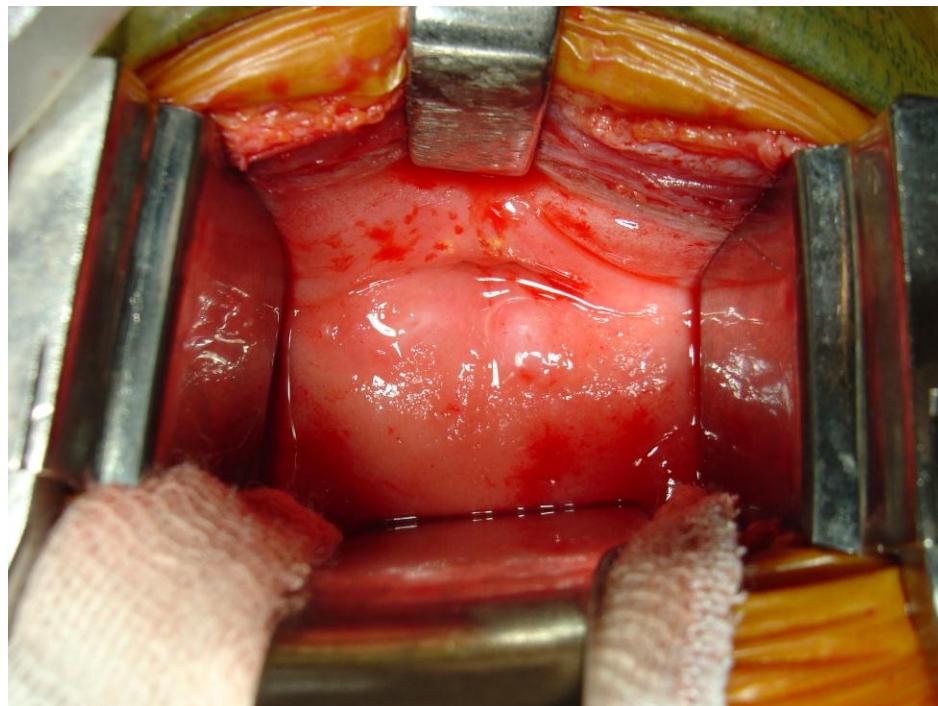
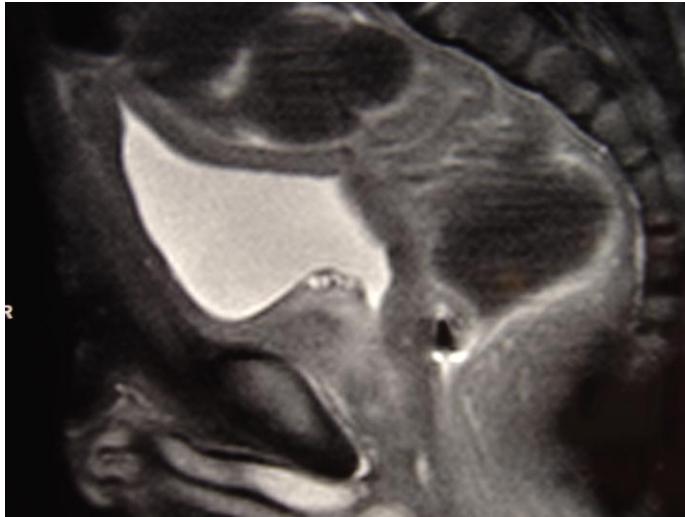


Tumour volume: 40 ml

After 5 courses of IVA



Tumour volume: 1.7 ml



Bladder neck partial resection (viable T cells) + brachytherapy



Comparison of the 3 MMT studies

	MMT 84	MMT 89	MMT 95
no significant local treatment	4/13 (31%)	17/44 (39%)	38/62 (61%)*
bladder preservation	9/13 (69%)	32/44 (73%)	47/62 (76%)
ERT of a preserved bladder	4/9 (44%)	13/32 (40,5%)	7/47 (15%)

* 1 pt: Secondary cystectomy for a non functioning bladder

Conclusion

- **The burden of local therapy decreased in the MMT studies, whilst maintaining survival rates,**
- **Further assessment of the late effects of local therapy (brachytherapy) is needed.**

A photograph of a sunset over a calm sea. The sky is filled with dramatic, dark clouds illuminated from behind by the setting sun, which casts a warm orange glow across the horizon. The water in the foreground reflects the light of the sun.

Thank you