


The ROYAL MARSDEN
NHS Foundation Trust

Prostate cancer radiotherapy

Chris Parker



Prostate cancer radiotherapy

- **Primary radiotherapy**
 - MRC PR07
 - SPCG7
 - MRC RT01
- **Post-operative radiotherapy**
 - SWOG 8794
 - EORTC 22911
 - RADICALS



Primary radiotherapy



3

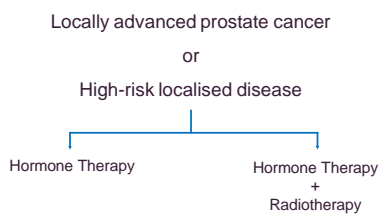
Locally advanced prostate cancer: what we already knew

- RT + hormones is more effective than RT alone
- Long-term hormone therapy is now standard

So, is RT needed in addition?



MRC PR07: Study Scheme

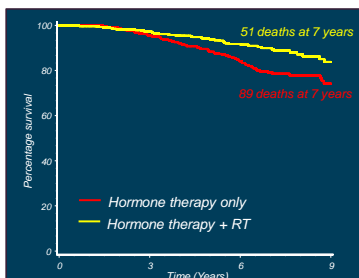


Late Toxicity

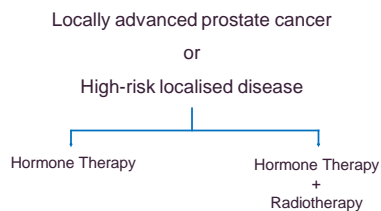
| | Grade ≥ 3 |
|------------------------|----------------|
| Diarrhoea | |
| Hormones alone | 0.7% |
| Hormones + RT | 1.3% |
| Rectal Bleeding | |
| Hormones alone | 0.5% |
| Hormones + RT | 0.3% |
| Urinary | |
| Hormones alone | 2.3% |
| Hormones + RT | 2.3% |



Deaths from prostate cancer



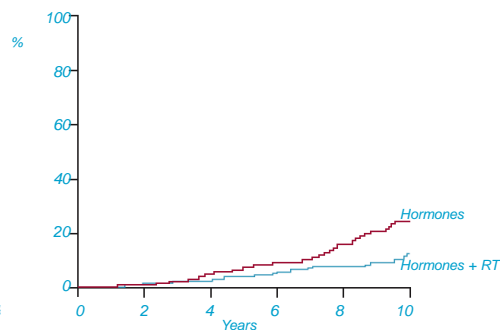
SPCG7: Study Scheme



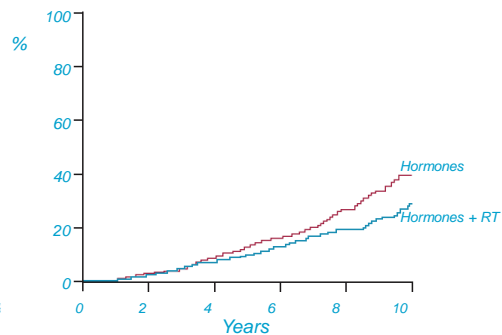
Late Toxicity

| | Grade ≥ 3 |
|-----------------------------|----------------|
| Erectile dysfunction | |
| Hormones alone | 48% |
| Hormones + RT | 53% |
| Bowel symptoms | |
| Hormones alone | 1% |
| Hormones + RT | 3% |
| Urinary incontinence | |
| Hormones alone | 3% |
| Hormones + RT | 5% |

Deaths from prostate cancer



Deaths from any cause

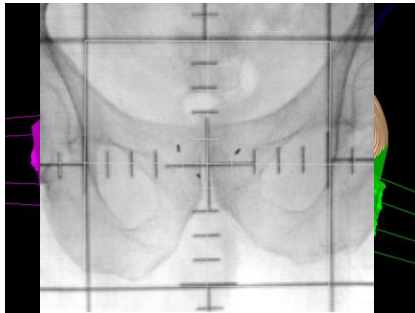


Locally advanced prostate cancer: take home message

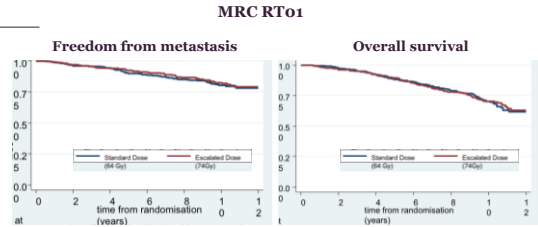
- RT + hormones is more effective than RT alone
- We now know that RT + hormones is better than hormones alone

Hormone therapy + RT is now standard

Radiotherapy is getting better!



Dose of radiotherapy



74Gy is no better than 64Gy!

Do Patients With Localized Prostate Cancer Treatment Really Want More Aggressive Treatment?

Julia J. van Tol-Geerdink, Peep F.M. Stalmeier, Emile N.J.T. van Lin, Eric C. Schimmel, Herk Huizenga, Wim A.J. van Daal, and Jan-Willem Leer

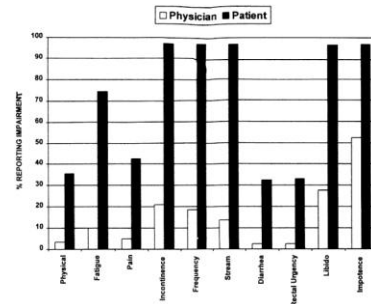
- 150 patients, offered choice of 70Gy or 74Gy
- 75% chose the lower dose
- “many patients attach more weight to quality of life..than to improving survival”
- “patients should be involved in radiation decision-making”

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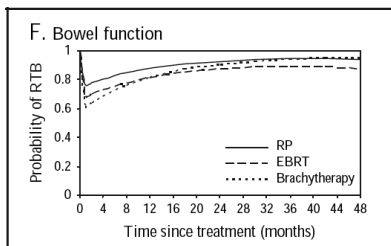
DIFFERENCES IN UROLOGIST AND PATIENT ASSESSMENTS OF HEALTH RELATED QUALITY OF LIFE IN MEN WITH PROSTATE CANCER: RESULTS OF THE CAPSURE DATABASE.

LITWIN, MARK; LUBECK, DEBORAH; HENNING, JAMES; CARROLL, PETER
Journal of Urology, 159(6):1988-1992, June 1998.



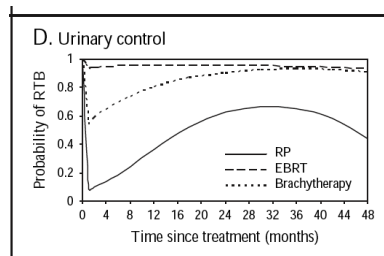
Survivorship Beyond Convalescence: 48-Month Quality-of-Life Outcomes After Treatment for Localized Prostate Cancer

John L. Gore, Lorna Kwan, Steve P. Lee, Robert E. Reiter, Mark S. Litwin



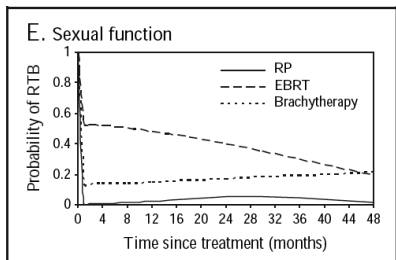
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**Survivorship Beyond Convalescence:
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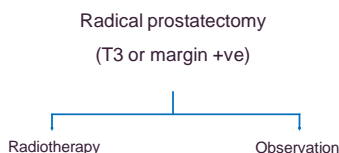


Post-operative radiotherapy

Post-operative radiotherapy: what we already knew

- In other types of cancer, surgery is routinely followed by RT
- Standard practice after radical prostatectomy is observation

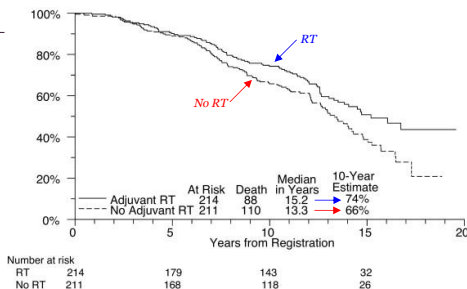
SWOG 8794: Study Scheme



Late Toxicity

| | RT | Observation |
|----------------------|-------|-------------|
| Urinary incontinence | 6.5% | 2.8% |
| Urethral stricture | 17.8% | 9.5% |
| Rectal complications | 3.3% | 0% |

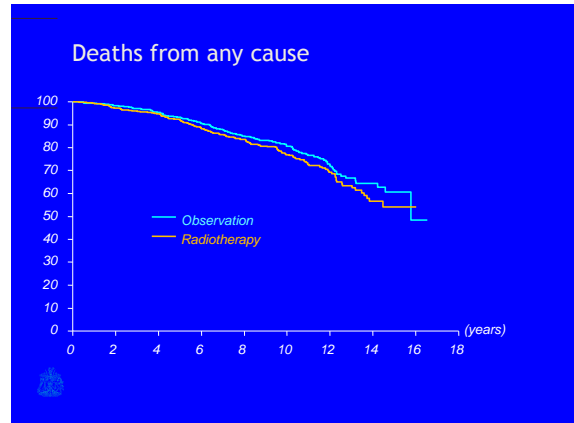
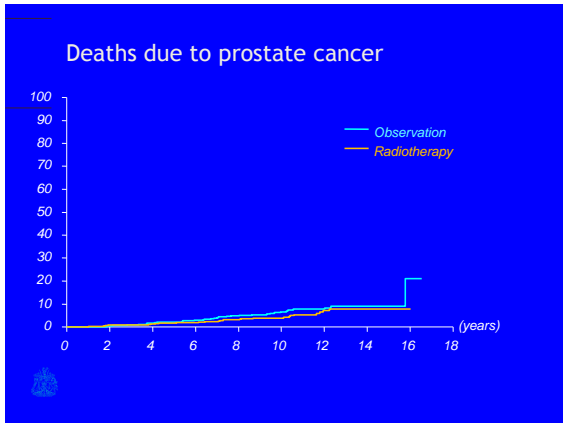
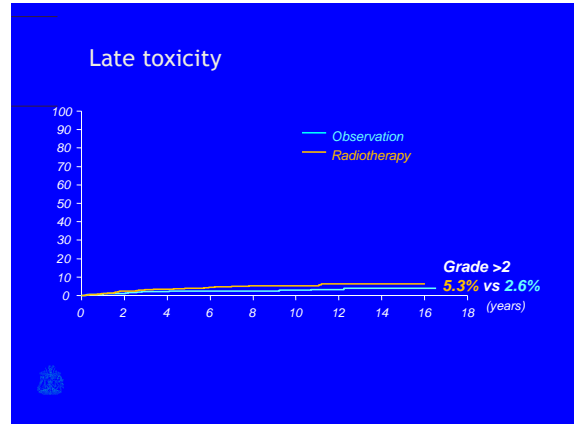
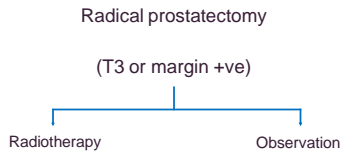
Deaths from any cause



Thompson et al. JAMA 2007

Thompson et al. J Urol 2009

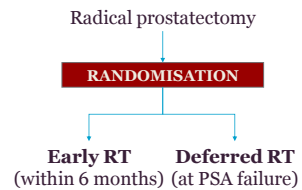
EORTC 22911: Study Scheme



Post-operative radiotherapy: take home message

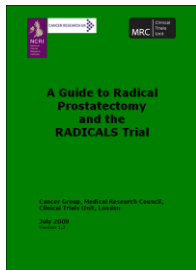
- In other types of cancer, surgery is routinely followed by radiotherapy
- In prostate cancer, we still don't know whether to follow surgery with radiotherapy
- RADICALS trial is now trying to answer this question

RADICALS-RT



Email: radicals@ctu.mrc.ac.uk

Recruitment Aids



Email: radicals@ctu.mrc.ac.uk

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