T3 N0/N1 Mid or Upper 1/3
MR-CRM >3mm

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3 main issues

- Risk of recurrence without treatment
- Risk of side effects
- Ability to predict clear margin
T3N0 upper1/3

Little evidence to support routine preop radiotherapy unless margin threatened

Either the trials are negative, or if positive, the absolute benefit of routine preop treatment is very small
Pelvic recurrence rates: preop trials in the modern era

**Dutch trial**
Middle third: 3.7% with XRT, 13.7% without.
Stage 3: 10.6% with XRT, 20.6% without

**MRC trial**
Stage 3: 7% with preop, 15% with post op
Middle third: 5% with preop, 10% with postop
Side effects of radiotherapy

- In general, radiotherapy makes the side effects of surgery worse.
- At these dose levels, it is relatively well tolerated if the patient doesn’t have pelvic surgery – eg patients with anal cancer.
- Exceptions are menopausal and vaginal symptoms and impotence in some men.
Side effects of radiotherapy

- Delayed healing of perineal wound
  - Shouldn’t be relevant for these patients

- Loss of pliability
  - Potential problem with middle third
  - Should be possible to spare lower third when treating upper third tumours

- Damage to sphincter complex
  - Partial sphincter irradiation with some middle third tumours
  - Spare sphincter with upper third tumours
Late effects of radiotherapy
Anal and rectal dysfunction

Swedish trial – completed 1990
>4 bowel movements/day: 20% vs 8%
Incontinence with loose stool: 50% vs 24%
solid stool: 20% vs 8%

Dutch trial found similar results

MRC trial found lower rates: 16% vs 6%
In this most recent trial the increased risk of incontinence is similar to the reduction in recurrence.
MR Imaging in rectal cancer

MERCURY Trial

18 specialist gastrointestinal radiologists with 5-20yrs experience in abdominal and pelvic MR

Not clear whether these results can be applied to the BC environment as it currently stands
Conclusion

- Current policies have led to rates of pelvic recurrence that are comparable to those obtained in large scale trials.

- While there is room to refine our policies, we need to be careful that we don’t throw the baby out with the bath water.