

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.