



Rectal Cancer Update 2008  
The Last 5 cm

*Consensus Building*

# Case –Distal Rectal Cancer

- 65 male physician
  - Rectal mass: 5cm from anal verge, 1cm above sphincter

? *Imaging choice: CT vs MR vs ERUS*

? *Adjuvant radiation choice: Preop radiation (short vs long) vs postop chemorad*

? *Surgical procedure choice: APR vs extended APR / ASR vs ISR vs local excision*

# Consensus Issue: Preop Imaging

- 65 male physician
  - Rectal mass: 5cm from anal verge, 1cm above sphincter
- Information required to plan preop radiation and surgery
  - TNM
  - Location above/ below cul de sac, relation to pelvic organs
  - Radial margin clearance / invasion of adjacent pelvic organs
  - Clearance/ invasion of anal sphincter

# Imaging Techniques: Reporting template

- No radiologist reporting template for
  - TNM
  - Location above/ below cul de sac, relation to pelvic organs
  - Radial margin clearance / invasion of adjacent pelvic organs
  - Invasion of anal sphincter

# Imaging Techniques: Attributes

- CT
  - Widely available
  - Use 3mm cuts in pelvis for improved definition of radial margin clearance
- MR
  - Improved definition (HD quality) of clearance from adjacent organs / mesorectal margins
- ERUS
  - Improved definition of T1/T2 lesions
  - Improved definition of fat plane anterior to distal rectum behind prostate, vesicles, vagina
  - Improved definition of clearance/ invasion of sphincters

# Imaging Techniques: Cancer Location

- CT
  - All rectal cancers
- MR
  - Anal distance < 12 cm (at or below cul de sac)
- ERUS
  - Anal distance < 12 cm
  - Anterior location
  - Proximity to sphincter consideration for sphincter preserving resection vs APR
  - T1/T2 superficial lesion considered for local excision

# Imaging Techniques: Availability

- CT all cases in community hospital
- If location < 12 cm
  - MR in regional hospital
  - ERUS availability limited at this time
    - St Paul's
    - BCCA Vancouver
    - Victoria

# Imaging Techniques – Consensus Q's

- Should radiologist report rectal cancer imaging using a template? Yes / No
  - Should SON request radiology template reporting? Y / N
- Is MR available in your region for imaging rectal cancers < 12 cm from the anus? Yes / No
  - Should SON request regional MR? Yes / No
- Is ERUS available in your region for imaging rectal cancers < 12 cm from the anus? Yes / No
  - Should SON request regional ERUS? Yes / No

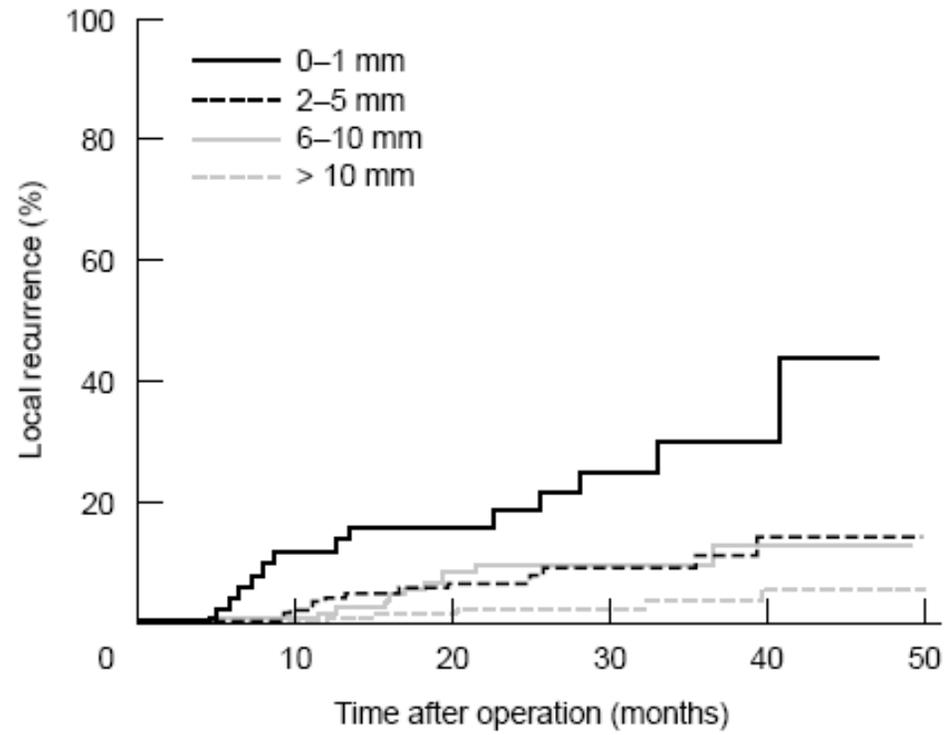
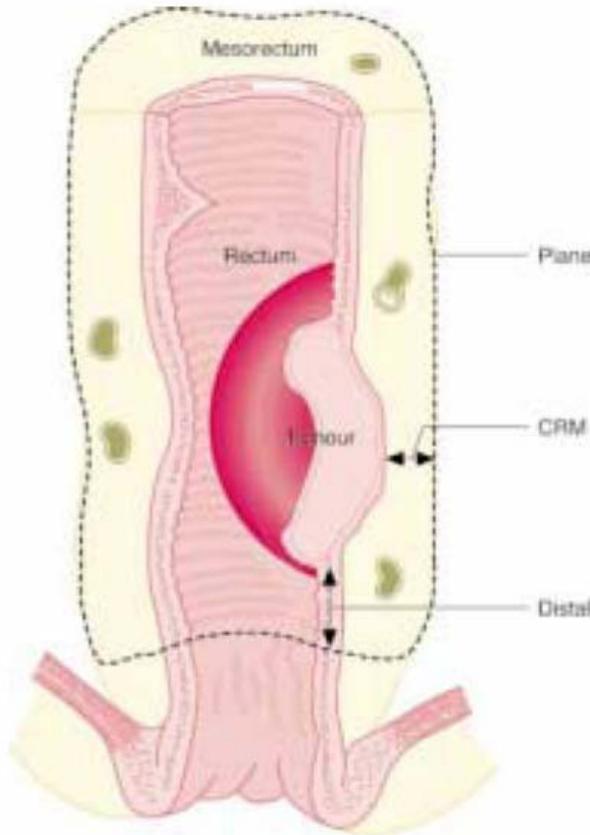
# Preop Adjuvant Radiation: Choices

- Preop adjuvant radiation indications:
  - T3-4 and/ or N1-2
- Short course preop equivalent local control to long course preop chemorad
  - Consider long course preop chemorad to down-stage for clinical fixation or for sphincter preservation

# Preop Adjuvant Radiation: Selective

- Consider no preop radiation
  - T1-2, N0
    - Dutch study stage 1, 2, 3 (no rad): LR 1, 6, 15%
  - T3N0 predicted mesorectal margin > 3mm
    - Requires study

# Effect of Negative CRM in non-radiated TME (not sub-analyzed by stage)



# Adjuvant radiation - Choices

- Postop chemoradiation for T3, N1-2 if not given preoperatively
- More benefit from preop radiation
  - German RCT showed 5 yr local recurrence of 6% preop vs 13% postop,  $p < 0.006$

# Adjuvant radiation – Consensus Q1

- Which of the following are indications for adjuvant radiation for rectal cancer?
  - a) T1
  - b) T2
  - c) T3
  - d) T4
  - e) N1
  - f) N2

## Adjuvant radiation – Consensus Q2

- Which of the following are indications for adjuvant radiation for rectal cancer?
  - a) All rectal cancers
  - b) No radiation for upper third location
  - c) All cancers <12cm (mid and distal third locations)
  - d) All cancers with threatened radial margins

Indications for adjuvant radiation are complex including considerations of T and N stage, rectal third location, and radial margin prediction.

*Considering the complexity of management and relative infrequency of distal third rectal lesions ...*

Consensus Question:

*Is the distal third rectal location  
enough of a problem that we  
should consider studying these  
patients in a multidisciplinary  
regional centre for imaging and  
preop radiation consultation?*

Y / N

# Surgical Procedure – Consensus Q's

- Is local excision an acceptable operation for a superficial rectal cancer? Y/N
- Should all local excision patients receive postop radiation? Y/N
- Do all distal third rectal cancers require APR? Y/N

## Indications for referral to a regional centre – Consensus Question

- Which of the following are potential indications for referral to a regional centre?
  - Recurrent rectal cancer
  - Clinical fixation
  - Intersphincteric resection / sphincter-preserving APR
  - TEM

# Case –Distal Rectal Cancer

- 65 male physician
  - Rectal mass: 5cm from anal verge, 1cm above sphincter

? *Imaging choice: CT vs MR vs ERUS*

? *Adjuvant radiation choice: Preop radiation (short vs long) vs postop chemorad*

? *Surgical procedure choice: APR vs extended APR / ASR vs ISR vs local excision*

# Take home

- Local recurrence for rectal cancer has improved with preop radiation and TME techniques
- Achieving negative radial margin for distal third rectal location is problematic