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 downstage 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)

Wibe, Br J Surg 2002
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