Surgery for Locally Advanced Esophagus Cancer: This Better Be Worth It.

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Esophageal Resection: A Low Mortality (2%) High Morbidity (25%) Enterprise

Esophageal Cancer: Two Distinct Disease

Esophageal Resection: A Low Mortality (2%) High Morbidity (25%) Enterprise

Surgery Alone Cures Early Cancer
(Rice 2003)

CROSS Trial

368 Resectable Patients
Randomized to Induction CRT (41.4 Gy in 1.8-Gy fractions) + Surgery versus Surgery Alone
Variance in Outcomes Adenocarcinoma versus Squamous


Surgical Monotherapy

Esophageal Cancer: Preop Chemotherapy

- U.K. MRC OEO-2 (n=802)
  - 2 preop cycles of 5-FU + Cisplatin
  - Adeno 66%, Squamous 31%
  - 6% increase 5 yr OS

- U.K. MAGIC: pre and post op ECF in gastric cancer (n=503)
  - Adeno only
  - 11% GE junction
  - 15% distal esophageal adeno
  - No improvement in R0 resection rate, 13% increase in 5 year OS
  - No Path CRs

Cunningham  NEJM 355: 11; 2006
MRC Lancet 359: 1727; 2002
Esophageal Cancer: Preop Chemotherapy

- U.S. INT 113 (n=440)
  - 3 pre, 3 post op cycles of 5-FU + Cisplatin
  - Adeno 54%, Squamous 46%
  - No improvement in R0 resection rate, disease free or overall survival
  - Path CR 2.5%


Esophageal Cancer: Adjuvant Therapy

- Survival with surgery alone: 20-40%
- Something more than surgery alone should be done
  - 14 RCTs with 2422 study patients
  - Trend toward improved outcomes with Combined Neo Adjuvant Chemoradiotherapy

Trimodal Versus Bimodal Approaches in Esophageal Surgery

Local control? Survival benefit?
Squamous Cell Type

Two cycles 5-FU and Cisplatin / 46 Gy in 4.5 weeks) As Induction Regimen

Randomization to three additional cycles of FU/cisplatin / 20 Gy Radiation or Surgery

Bedenne L et al. JCO 2007;25:1160-1168

Survival of patients with a pathologic complete response compared with patients with residual disease.


Residual Disease: Poor Outcome

ERCC1 mRNA expression levels predicts histopathological response

Transhiatal Esophagectomy or Transthoracic Esophagectomy with Extended en Bloc Lymphadenectomy

**Surgery: Selectively Beneficial**

- Surgery Alone for Esophageal Cancer “Doesn’t Cut it”
- Induction Chemoradiotherapy is Preferred Conferring Improved Complete Pathologic Response and R0 Resection Rates
- Adenocarcinomas of the Distal Esophagus are less CRT–responsive than Squamous Cell
- Identifying Complete Pathologic Responders Remains a Challenge