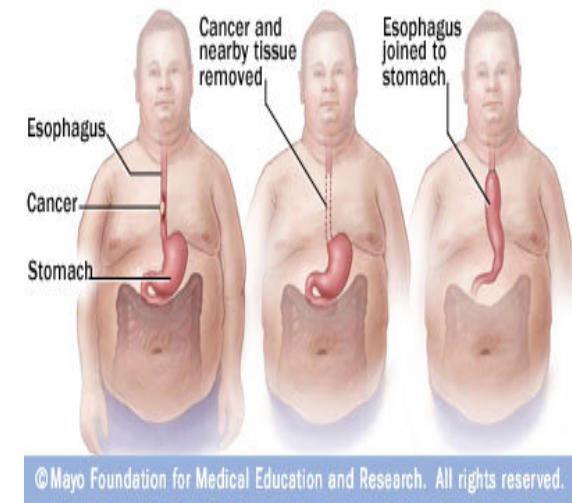


AN AUDIT OF ANALGESIA AND FLUID MANAGEMENT IN PATIENTS UNDERGOING AN OESOPHAGECTOMY

The need for an Integrated Care Pathway

OESOPHAGEAL CANCER FACTS

- Ireland has one of the highest rates of oesophageal cancer in Europe
- 400 new diagnoses every year in Ireland
- SJH manages approximately 40% national workload
- Oesophageal cancer is the 6th leading cause of cancer related mortality worldwide
- Increasing incidence associated with
 - Obesity
 - Smoking
 - Reflux/ Barretts Oesophagus



Slide 2

Z1

Zieta, 06/05/2010

OESOPHAGEAL CANCER FACTS



- Disease that presents late and progresses quickly
- Of 603 patients presenting to SJH in 2004-2008 only 227 patients progressed to surgery
- 310 patients radical approach, 293 patients palliative approach
- Predicted 5 year survival of 30-40% for those treated with a curative intent

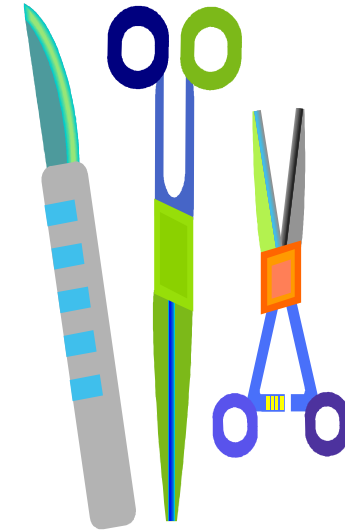




- High volume centres of excellence are proven to have reduced morbidity and mortality
- Operative mortality rate was 4.6 fold higher when performed by surgeons with low case volume
- SJH surgical mortality rate is $<2\%$
- SJH recognised high volume centre and centre of excellence
- Need to be up to date with European standards and leading the way for national standards



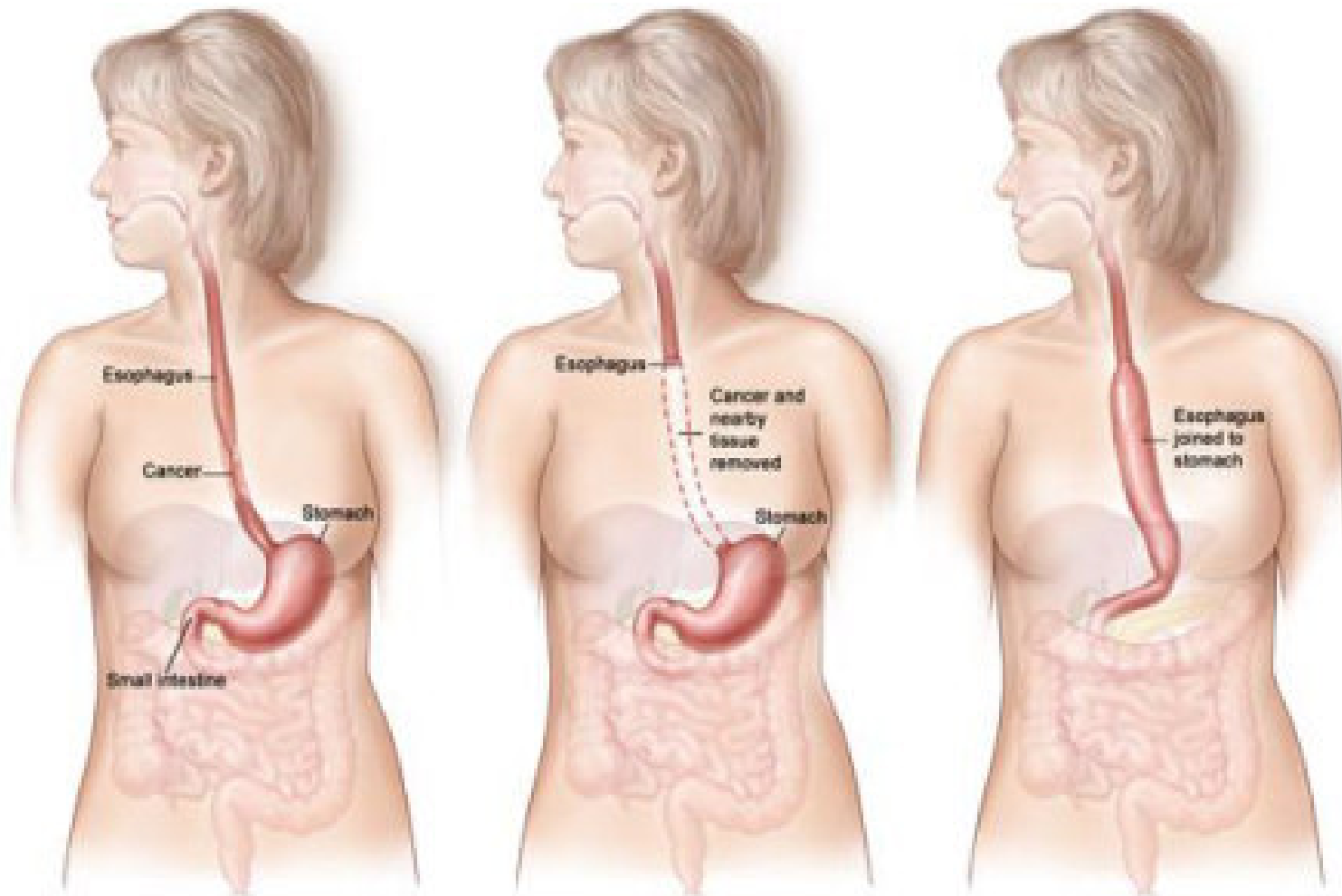
SURGERY



- High risk
- Major Complications associated with it
- Morbidity based mainly on pulmonary complications, pain, inappropriate fluid management, anastomotic leakage, wound infections, vocal cord paralysis and chyle leaks.
- Significant reduction in oesophagectomy related mortality when standard post op care measures are in place
- Need to look at current practice



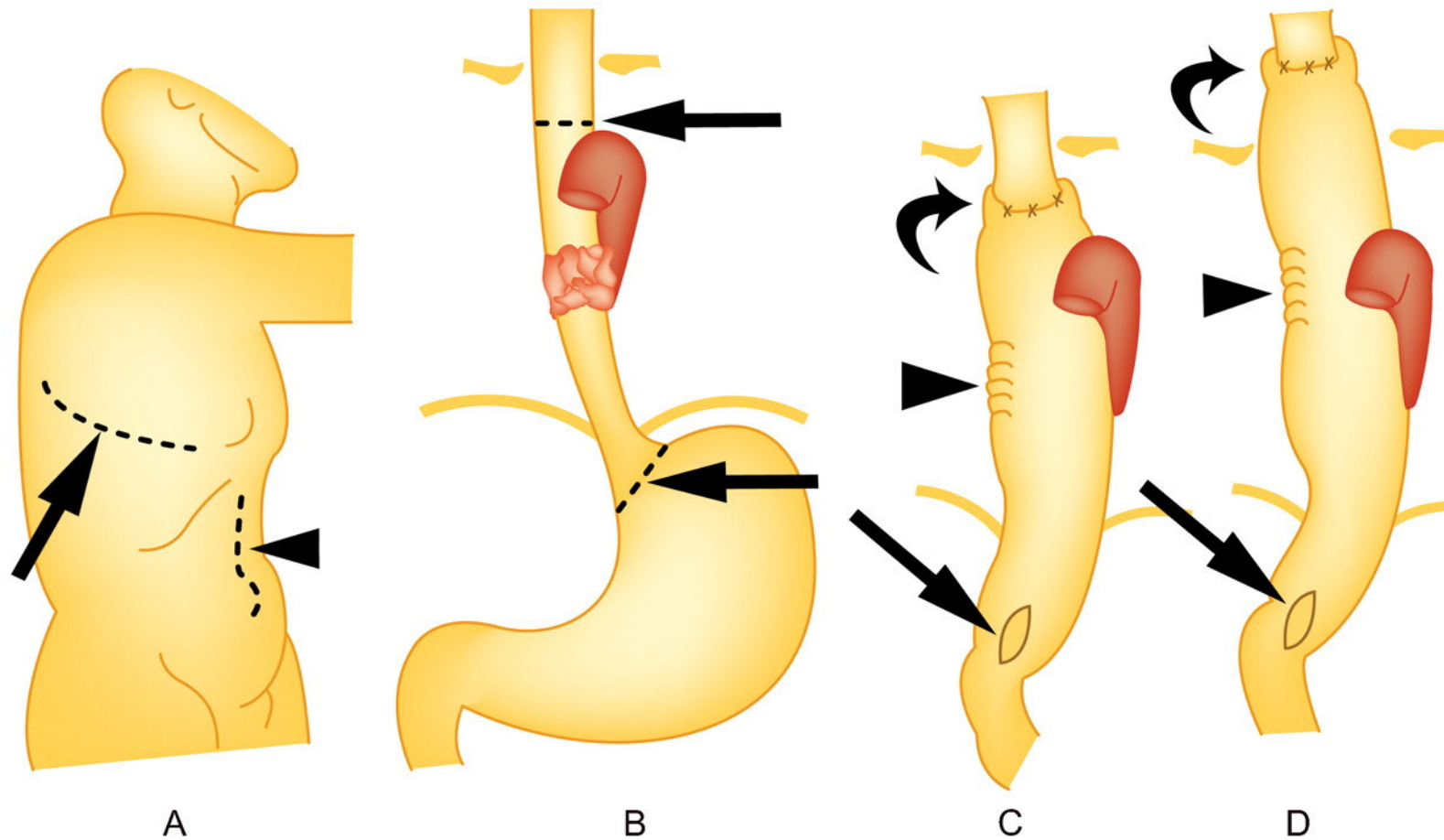
SURGERY



National Cancer Institute



Figure 1. Drawings illustrate transthoracic esophagectomy with a laparotomy and a right thoracotomy (Ivor Lewis procedure).



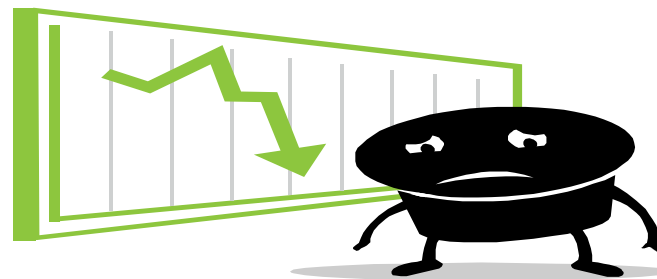
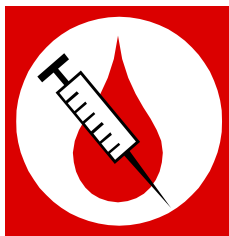
Kim T J et al. Radiographics 2007;27:409-429

RadioGraphics

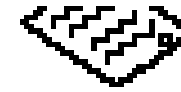


AIM OF RESEARCH

- Focus on pain and fluid management : Why
- Increased pain associated with increased morbidity due to an inability to cough effectively, partake in physio and mobilise- **RTI/Pneumonia**
- Excessive fluid management associated with impaired cardiac and respiratory function, impaired wound/anastomotic healing and coagulation, and delay of gastro-intestinal functioning



METHODOLOGY



- Audit tool prepared and approved by RAC
- Sample: Patients who underwent oesophageal resection during a 2 year period-104 suitable
- Retrospective data for 2008 patients
- Prospective data for 2009 patients
- Excluded if intubated
- Patients Coded with a UPI

} Patient
Records
&
Post op
Visits



RESULTS- PAIN AUDIT

- 98% of patients received an epidural and remifentanyl infusion during surgery
- Variation in the use of spinal morphine (38%), epidural fentanyl (28%) and intraoperative paracetamol (65%)
- 61% had pain in the recovery room post surgery with 21% complaining of severe pain
- 43% had pain on admission to HDU with 27% describing severe pain
- On admission to the ward 22% experienced some pain- 5% moderate-nil severe
- 97% of patients were reviewed by the pain team



RESULTS –FLUID AUDIT



- No standard regimen applied
- 46% of patients received <3 litres, 40% received 3-4.5 litres and 14% received > 4.5 litres
- 93% received inotropes intraoperatively
- HDU- 72% on inotropes
- 69% received a fluid challenge in HDU
- Positive balances: 70% on Day 0
83% on Day 1
75% on Day 2
- Diuretics: 33% of patients required them in HDU
41% of patients required them in ward
- CVP not measured consistently – 44% monitored on Day 0



RECOMMENDATIONS



- Need to standardise care
- Develop an Integrated Care Pathway which focuses on standardizing post operative care
- Focus on guidelines for standardizing intraoperative care
- Reaudit



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