# APPLYING ENHANCED RECOVERY PRINCIPLES: EARLY TESTING IN UPPER GI CANCER

William Allum

Consultant Surgeon, Royal Marsden NHS Foundation Trust

## ENHANCED RECOVERY ? POSSIBLE

Major procedure

Painful

Anastomotic complications

Nutritional problems

## ENHANCED RECOVERY ? EVIDENCE

- US reports of "streamlined care pathways"
- 90 patients Ivor Lewis oesophago-gastrectomy
- Median hospital stay 7 days range 6 -74
- Long stayneoadjuvant therapy> 70 years

## ENHANCED RECOVERY ? EVIDENCE

- Spanish report "written clinical pathway"
- Two groups before and after pathway
- Median length of stay

before: 13 (range 8-106)

after: 9 (range 5-98)

Delay if > 65 years

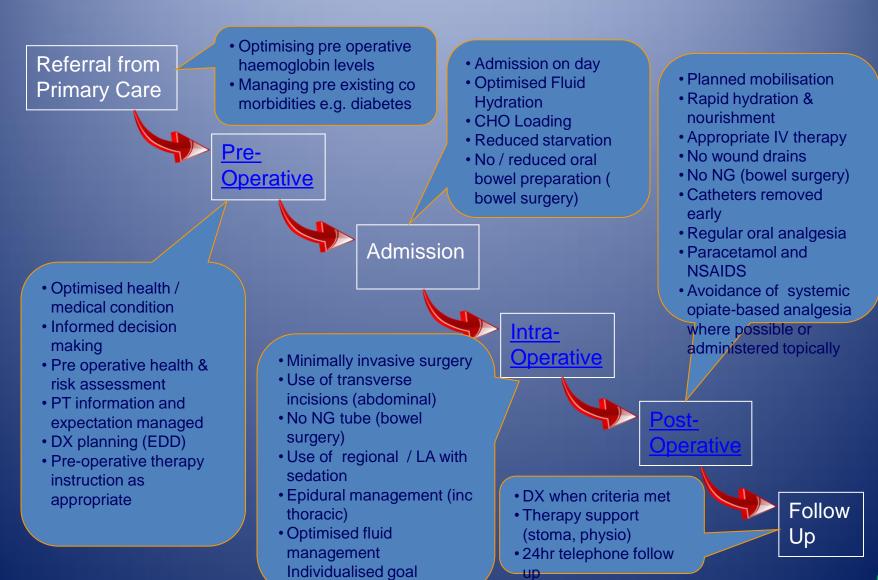
## ENHANCED RECOVERY ? EVIDENCE

- Pancreas fast-track programme
- Compared 2 groups before and after intervention

- Improved delayed gastric emptying
- Reduced length of stay

Complications increased length of stay

#### Example of enhanced recovery elements



directed fluid therapy

#### ENHANCED RECOVERY ROYAL MARSDEN NHS FOUNDATION TRUST

Cancer Centre – SW London Cancer Network

Population 1.6M

Referrals – 6 cancer units plus extra network

350 new referrals per year

75 resections annually

#### ENHANCED RECOVERY STEERING GROUP

- Trust Executive Lead Nurse
- Medical Surgeon Intensivist
- NursingWardCritical CareRehabilitationCNS
- AHP
   Dietician
   Physiotherapy

#### ENHANCED RECOVERY PATHWAY

MDT

Outpatients

Perioperative

Discharge planning

Audit

#### ENHANCED RECOVERY OUTPATIENT CLINIC

- Medical / Health Questionnaire
- Comorbidity assessment
- Dietician
- Physioshuttle walk testspirometry
- CNS
   Written information

#### ENHANCED RECOVERY CLINIC ASSESSMENT

- very fit with no comorbidity
- fit enough to proceed with treatment plan but have comorbidity
- patients with comorbidity who are borderline for radical surgery
- unfit due to significant comorbidity or patient choice not to proceed with treatment plan.

#### ENHANCED RECOVERY MANAGEMENT PLAN

- (i) will proceed with treatment plan
- (ii) refer for CPX but will proceed with treatment plan in parallel with comorbidity assessment
- (iii) refer for CPX and anaesthetic review and be reviewed prior to proceeding with treatment plan. If for surgery to be managed as group (ii); if unfit to be managed as group (iv)

• (iv) will be referred for non-radical therapy or palliative care.

### ENHANCED RECOVERY OUTPATIENTS

Post preop chemo review

Repeat process of assessment

### ENHANCED RECOVERY PRE-ADMISSION ASSESSMENT

- 2 weeks before surgery
- Intensivist
- Dietician
   nutrition suppliment
- Physiotherapy exercise incentive spirometer
- CNS

#### **NUTRITIONAL SUPPORT**

- Use of immunonutrition pre-operatively
  - > 5 days of 750 ml or *Oral Impact* containing arginine (oral)
  - A reduction in length of stay in hospital
  - significantly fewer post operative infectious complications, such as wound infections, UTIs, pneumonia

#### ENHANCED RECOVERY PERIOPERATIVE

Care pathway – daily plan

Analgesia

Mobilisation

Nutrition

## ENHANCED RECOVERY PERIOPERATIVE - ANALGESIA

Epidural

**PCA** 

Regional blocks

## ENHANCED RECOVERY PERIOPERATIVE - PHYSIOTHERAPY

Mobilisation

Incentive spirometer

Pedometer

## ENHANCED RECOVERY PERIOPERATIVE - NUTRITION

Oral intake

Jejunostomy feed
 standard enteral formula for normally nourished
 patients
 immunonutrition for malnourished patients

 Continued use of jejunostomy feeding until patient meets their nutritional requirement

#### ENHANCED RECOVERY DISCHARGE PLANNING

Verbal and written instruction

Treatment Record Summaries

Nutritional support
 dietary advice to optimise oral intake
 monitoring of nutritional status in outpatients

### ENHANCED RECOVERY EXPERIENCE

Group I – 10 days post oesophagectomy

Group II – 8 -13 days post gastrectomy

Group III – 20+ days post oesophagectomy

#### CONCLUSION

- Enhanced Recovery possible for Upper GI
- Team approach
- Culture change
- Impact on quality of care
- ? Suitable for all