



ESPEN Congress Glasgow 2002

Peri-Operative Nutritional Care

Accelerated Recovery from Surgery

Dr. Jonas Nygren

Accelerated Recovery from Surgery

Jonas Nygren

Ersta Hospital and Karolinska Institute,
Stockholm, Sweden



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ERAS - perioperative care protocols



<u>Type of surgery</u>	<u>Fast track /ERAS</u>	<u>Traditional</u>
Inguinal hernia	2-7h	0-1 day
Lap cholecystectomy	< 1d	1-2d
Minicholecystectomy	< 1d	na
Fundoplicatio	<1d	2-3d
Open colorectal	2-3d	8-11d
Lap colorectal	2-3d	4-6d
Lungresection	1d	8-10d
Carotid EA	<1d	3-4d
Aortic aneurysm	3d	7-10d
Prostatectomy	1-2d	4-5d
Mastectomy	<1d	2-3d
Adrenalectomy	<1d	3-5d
Nephrectomy	<1d	3-7d

ERAS studies

- **Two published studies**
 - **Kehlet, Hvidovre, DK (Ann Surg, 2000)**
 - 60 pat, comparison with other institutions
 - **Henriksen, Århus, Dk (Nutrition, 2002)**
 - 40 pat, randomised, 2 wards at the same institution
- **Ongoing study at Ersta**
 - Initially 75 pat studied using traditional care, changing to ERAS recently, currently 13 pat included in the same ward

ERAS protocol

- **Multimodal, multidisciplinary strategy**
- **A standardized protocol**
 - **Preoperatively**
 - **Perioperatively**
 - **Postoperatively**
- **To enhance recovery from surgery**

Preoperative identification and treatment of risk factors

- **Preoperative evaluation by multidisciplinary team**
- **Alcohol and smoking**
- **Assess nutritional status, SGA**
- **Nutrition 7-10 days before surgery in selected patients**
- **Patient education and information**

Patient information / expectations

- Preoperative information / expectations
 - Pat have less pain, requires less analgetica
 - *Egbert LD, NEJM, 1964*
 - Will aid coping, reduce preop anxiety
 - *Klafta JM, Anesth Analg, 1996*
 - Predicts functional outcome after surgery
 - *Mahomed NN, J Reumatol, 2002*
- Probably very important for patient compliance with the ERAS protocol

Revising perioperative care protocols

- **Antithrombotic / antimicrobial prophylaxis**
- **Preoperative carbohydrates**
- **Pre-anaesthetic medication**
- **Regional anesthesia (EDA)**
- **Minimally invasive surgery**
- **Transverse incisions**
- **Normothermia, oxygen supply**
- **Fluid and sodium administration**
- **Drains / catheters**

ERAS ; effects on outcome

- **Short hospital stay**
- **Rapid return of bowel function**
- **Improved physiological performance**
- **No proven effects on well-being yet**
- **No proven effects on morbidity yet**

Take home message

- **To be successful with an ERAS protocol**
 - **Establish an ERAS team**
 - **Establish routines for postop pain control**
 - **Educate the staff**
 - **Establish routines for collection of data and continuous quality control**