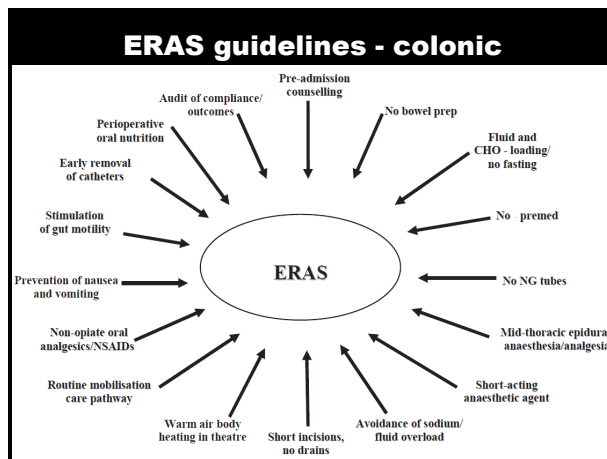


Ann Surg 2018;267:998-9. **ANNALS OF SURGERY**
A Monthly Review of Surgical Science Since 1885

ERAS implementation – time to move forward
Kehlet H.

ERAS in colorectal surgery



Dis Colon Rectum 2004;47:271-8. **ANNALS OF SURGERY**

Colonic Surgery With Accelerated Rehabilitation or Conventional Care
Linda Basse, M.D.,¹ Jens Erik Thorbol, M.D., Ph.D.,² Kristine Lossl, M.D.,² Henrik Kehlet, M.D., Ph.D.³

5 elements of perioperative care:

- preop information
- epidural analgesia (open)
- no N-G tube
- early feeding and mobilisation
- avoid fluid excess/ hypovolaemia

Dis Colon Rectum 2004;47:271-8. **ANNALS OF SURGERY**

Colonic Surgery With Accelerated Rehabilitation or Conventional Care
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	accl. care n=130	conv. care n=130	p < 0.05
age	74	72	
i.v. fluid > 24 h	8%	80%	*
nasogastric tube		↑	*
defaecation day	2	4.5	*
cardiac compl	2.3%	9%	*
pulm compl	0.8%	16%	*
hosp stay (days)	2	8	*

Ann Surg 2018;267:998-9. **ANNALS OF SURGERY**

ERAS implementation – time to move forward
Kehlet H.

“limited” evidence	“firm” evidence
• no premedication	• preop information
• short-acting anaesthesia	• epidural analgesia (open)
• no bowel preparation	• no N-G tube
• carbohydrate loading	• early feeding and mobilisation
• etc.	• avoid fluid excess/ hypovolaemia

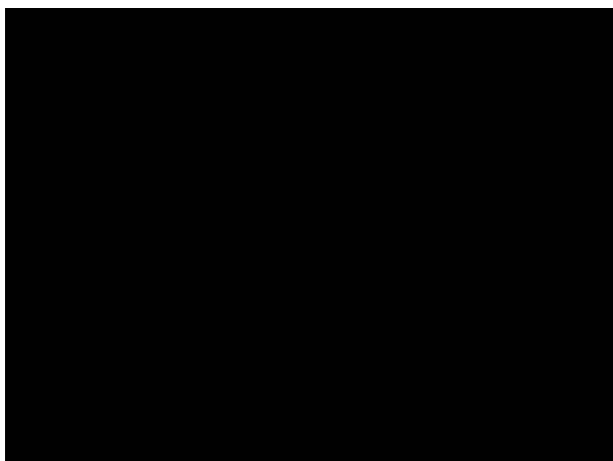
Surgery 2015;157:1130-6. **SURGERY**

Eight years of experience with Enhanced Recovery After Surgery in patients with colon cancer: Impact of measures to improve adherence
Nathalie Bakker, MD,^{a,b,c} Hamit Cakir, MD,^a H. J. Doodeman, MSc,^{a,b} and A. P. J. Houdijk, MD, PhD,^{a,b,c} Alkmaar and Amsterdam, The Netherlands

Ann Surg 2018;267:992-7. **ANNALS OF SURGERY**

Postoperative ERAS Interventions Have the Greatest Impact on Optimal Recovery
Experience With Implementation of ERAS Across Multiple Hospitals
Mary-Anne Aarts, MD,*† Ori D. Rotstein, MD,‡ Emily A. Pearsall, MSc,‡ J. Charles Victor, MSc,‡ Allan Okrainec, MD,‡* Marg McKenzie, RN,‡‡ Stuart A. McCluskey, MD,‡‡‡ Lesley Gottlib Conn, PhD,‡‡ and Robin S. McLeod, MD†††††, on behalf of the iERAS group

postop elements most important



ERAS in hip and knee arthroplasty

the "pain and risk free" THA and TKA ?

Br J Anaesth 2019;123:269-87

British Journal of Anaesthesia

Anaesthetic care of patients undergoing primary hip and knee arthroplasty: consensus recommendations from the International Consensus on Anaesthesia-Related Outcomes after Surgery group (ICAROS) based on a systematic review and meta-analysis

Mermisoudis SG¹, Cozowicz C², Bekaris J², Bekere D³, Liu J³, Soffin EM³, Mariano ER⁴, Johnson RL⁵, Hargrett MJ³, Lee BH⁶, Wendel P³, Brouillette M³, Go G³, Kim SJ³, Baakini L³, Wetmore D³, Hong G³, Goto R⁶, Jivanelli B⁶, Argyra E⁷, Barrington MJ⁸, Borgest A⁹, De Andres J¹⁰, Elkassabany NM¹¹, Gaultier PE¹², Germer P¹³, Gonzalez Della Valle A³, Govitrolo E³, Kessler P¹⁴, Kopp SL², Lavand'homme P¹⁵, MacLean CH¹⁶, Mantilla CB⁵, MacIsaac D¹⁷, McLawhorn A¹⁸, Neal JM¹⁹, Parke M¹⁸, Parvizi J²⁰, Pochler L¹³, Poeran J²¹, Poulosides LA²², Sites BD²³, Stundner O¹³, Sun EC²⁴, Viscusi ER²⁵, Votta-Velle EG²⁶, Wu CL³, Ya Deau JT³, Sharnock NE³

- **RA > GA on most outcomes**
- **interpretation:**
 - old RCT's without ERAS
 - limited data on newer GA
 - limited data in "high-risk"
 - recommendation ??

Knee Surg Sports Traumatol Arthrosc 2014;22:1744-58.

KSSTA
Knee Surgery, Sports Traumatology, Arthroscopy

Pain after knee arthroplasty: an unresolved issue

Irina Grosu · Patricia Lavand'homme · Emmanuel Thienpont

- **paracetamol and COX-2 inhibitors**
- **LIA (TKA)**
- **gabapentinoids (no)**
- **glucocorticoids**
- **ketamine (?) (opioid-users)**
- **adductor canal block (?) other blocks ?**

Kehlet (personal opinion)
PROSPECT <https://www.postoppain.org/> (in progress)

Acta Orthop 2018;89:141-4.

Acta Orthopædica

Outpatient total hip and knee arthroplasty – facts and challenges

Vehmeijer SB, Husted H, Kehlet H.

- **feasible in "some" patients**
- **first better – then faster !**
- **ideal LOS ?**
- **need for evaluation of cost reduction of same date discharge**