



ERAS inom Gynekologi

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Ledamot SwERAS styrelse



ERAS inom Gynekologi - historia

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AFTER-TREATMENT

SOME RADICAL CHANGES IN THE AFTER-TREATMENT OF CELIOTOMY CASES.*

BY EMIL RIES, M.D.

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The purpose of the changes

to make their recovery more rapid and more complete, so that they are able to leave the hospital at a much earlier date than has been customary and in such a condition of strength that they can follow their wonted occupations within a few days after their discharge from the hospital.



ERAS inom Gynekologi historik

*"I omit the customary efforts toward getting the **bowel** as **empty** as possible..."*

*"I found that the period for which it was advisable to confine such cases to bed could be counted by hours instead of days.....**beeing allowed to be up an about** as early as twenty-four hours after the operation...."*

*"these patients did **not present** the picture of listlessness and **muscular weakness**..."*

*"I found that patients who got up early...presented another symptom which necessitated a further change...**these patients were hungry.**"*

"I began to give them meat, bread and vegetables..."



ERAS inom Gynekologi historik

2000-
2010

2010-
2015

>2016

Fast track

LOS Smärtlindring

Danmark
Umeå,
Trollhättan
Linköping

(Minimalinvasiv
kontra öppen)

Fast track → ERP →
ERAS

LOS, Kostnader
Tillfredställelse

Retrospektiva cohorter
Implementeringstudier
Blandade cohorter

Australien
Sverige
Canada
USA Holland

ERAS

LOS, kostnader
opioidbehov
Minimal invasiv kirurgi
Opioidkrisen
Implementerings enkäter

USA
Canada

Internationellt



ERAS inom Gynekologi Guidelines

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Guidelines for pre- and intra-operative care in gynecologic/oncology surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations – Part I

Nelson G.^{a,*}, Altman A.D.^b, Nick A.^c, Meyer L.A.^c, Ramirez P.T.^c, Achtari C.^d, Antrobus J.^e, Huang J.^f, Scott M.^{g,h}, Wijk L.ⁱ, Acheson N.^j, Ljungqvist O.^k, Dowdy S.C.^l



journal homepage: www.elsevier.com/locate/ygyno



Society position statements/white papers

Guidelines for postoperative care in gynecologic/oncology surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations – Part II

G. Nelson^{a,*}, A.D. Altman^b, A. Nick^c, L.A. Meyer^c, P.T. Ramirez^c, C. Achtari^d, J. Antrobus^e, J. Huang^f, M. Scott^{g,h}, L. Wijkⁱ, N. Acheson^j, O. Ljungqvist^k, S.C. Dowdy^l





ERAS inom Gynekologi Guidelines

INTERNATIONAL JOURNAL OF
GYNECOLOGICAL CANCER

Guidelines for perioperative care in gynecologic/oncology: Enhanced Recovery After Surgery (ERAS) Society recommendations—2019 update

Gregg Nelson,¹ Jamie Bakkum-Gamez,² Eleftheria Kalogera,³ Gretchen Glaser,⁴ Alon Altman,⁵
Larissa A Meyer,⁶ Jolyn S Taylor,⁷ Maria Iniesta,⁶ Javier Lasala,⁸ Gabriel Mena,⁸ Michael Scott,⁹
Chelsia Gillis,¹⁰ Kevin Elias,¹¹ Lena Wijk,¹² Jeffrey Huang,¹³ Jonas Nygren,¹⁴ Olle Ljungqvist,¹⁵
Pedro T Ramirez,¹⁶ Sean C Dowdy¹⁷



ERAS inom Gynekologi

- **Standardiserat ingrepp:** Hysterektomi
- **Minimalinvasiv kirurgi**
- **"unga friska " kvinnor**
- **Äldre**
- **Smärtindikation**
- **Benign/ lokaliserad malign kirurgi**
- **Liten andel komplikationer**

- **Obstetriska operationer**

- **Ultraradikal kirurgi:**

Hysterektomi, salpingooforektomi, tarmresektioner en bloc, flera anastomoser, appendektomi, omentektomi, total perinektomi, lymfkörtelutrymning, splenektomi, leverresktioner, urologiska ingrepp

- **Öppen kirurgi**
- **Spridd Ovarialcancer, corpuscancer**
- **Äldre**
- **Svårt sjuka, lågt albumin, ascites**
- **Hög andel komplikationer**



ERAS inom Gynekologi

Vad vet vi?

Metaanalys > 6000 patienter, gyncancerkirurgi

ERAS minskar LOS (1.6 dagar)

ERAS sänker kostnaderna

ERAS minskar antalet komplikationer (32%)

ERAS minskar återinläggningar (20%)

Bish et al. *Outcomes of enhanced recovery after surgery (ERAS) in gynecologic oncology - A systematic review and meta-analysis*. Gynecol oncol 2021;161(1):46-55



ERAS inom Gynekologi

Vad vet vi?

ERAS minskar behovet av opioider
vid öppen och laparoskopisk kirurgi

Weston et al. *The impact of an enhanced recovery after minimally invasive surgery program on opioid use in gynecologic oncology patients undergoing hysterectomy.* Gynecol oncol 2020;157:469-475

Meyer L et al *Effect of an Enhanced Recovery After Surgery Program on Opioid Use and Patient-Reported Outcomes.* Obstet Gyencol 2018;132:281-290

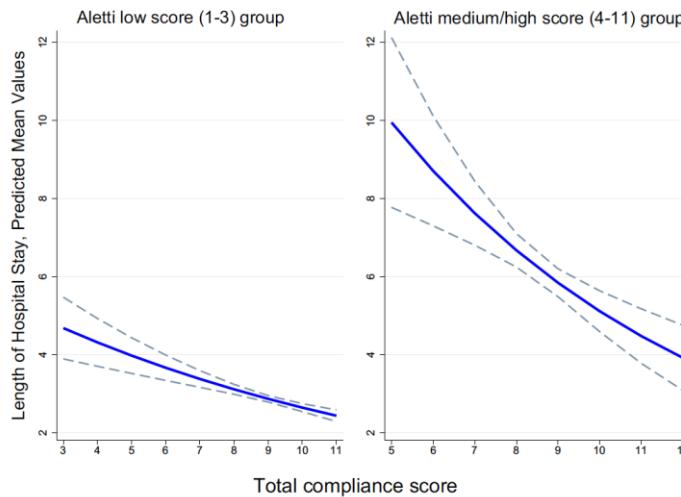


ERAS inom Gynekologi

Vad vet vi?

Ökad compliance till protokollet är korrelerat med kortare LOS och färre komplikationer

FIGURE 2
Compliance vs predicted LOS

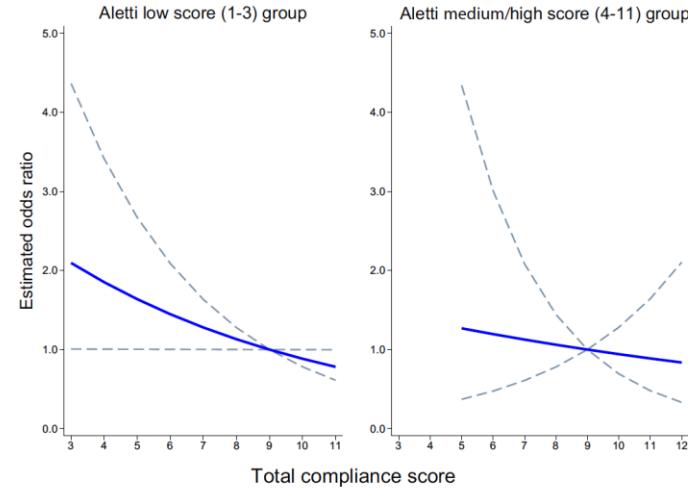


Association between total compliance score and length of primary hospital stay by operation complexity groups. Mean values of hospital stay were predicted by the negative binomial regression model adjusted for covariates. Dashed lines indicate 95% CIs.

LOS, length of stay; CI, confidence interval.

Wijk et al. International validation of Enhanced Recovery After Surgery Society guidelines on enhanced recovery for gynecologic surgery. Am J Obstet Gynecol 2019.

FIGURE 3
Compliance vs complications



Association between total compliance score and complications in total by operation complexity groups. The reference point used for the plot is total compliance score equal to 9. Presented as estimated odds ratio and 95% CI (dashed lines), adjusted for covariates.

CI, confidence interval.

Wijk et al. International validation of Enhanced Recovery After Surgery Society guidelines on enhanced recovery for gynecologic surgery. Am J Obstet Gynecol 2019.



ERAS inom Gynekologi ovarial cancer utmaningar

- Renodla studierna för gruppen
- Complexity scoring
- Fokus på gruppsspecifika problem
(exempelvis)

Dränage?

- Ascites
- Perinektomi
- Lymfödem

Anemi

Albuminemi

Regional anestesi
- USA kontra Europa

Prehabilitering

NACT



ERAS inom Gynekologi ovariancancer

- Sparsamt med data ännu
- Snabbare start på kemoterapi (80% vs 64% inom 28 dagar, OR 2.3)

Tankou et al. *Enhanced recovery after surgery protocols improve time to return to intended oncology treatment following interval cytoreductive surgery for advanced gynecologic cancers*. Int J Gynecol Cancer 2021;31:11145-53.



ERAS inom Gynekologi - obstetrik



American Journal of Obstetrics and Gynecology
Volume 219, Issue 6, December 2018, Pages 533-544

Special Report

Guidelines for intraoperative care in cesarean delivery: Enhanced Recovery After Surgery Society Recommendations (Part 2)

Aaron B. Caughey MD, PhD^a, Stephen L. Wood MD^b, George A. Macones MD^c, Ian J. Wrench MB ChB, PhD^d, Jeffrey Huang MD^e, Mikael Norman MD, PhD^f, Karin Pettersson MD, PhD^g, William J. Fawcett MBBS, FRCA, FFPMRCA^h, Medhat M. Shalabi MDⁱ, Amy Metcalfe PhD^b, Leah Gramlich MD^j, Gregg Nelson MD, PhD^b, R. Douglas Wilson MD, MSc^b

Antenatal and Preoperative care in Cesarean Delivery: Enhanced Recovery After Surgery Society Recommendations (Part 1)

R. Douglas Wilson MD, MSc^b , Aaron B. Caughey MD, PhD^a, Stephen L. Wood MD^b, George A. Macones MD^c, Ian J. Wrench MB ChB, PhD^d, Jeffrey Huang MD^e, Mikael Norman MD, PhD^f, Karin Pettersson MD, PhD^g, William J. Fawcett MBBS, FRCA, FFPMRCA^h, Medhat M. Shalabi MDⁱ, Amy Metcalfe PhD^b, Leah Gramlich MD^j, Gregg Nelson MD, PhD^b



American Journal of Obstetrics and Gynecology

Volume 221, Issue 3, September 2019, Pages 247.e1-247.e9

Original Research
Obstetrics

Guidelines for postoperative care in cesarean delivery: Enhanced Recovery After Surgery Society



^b, Stephen L. Wood MD^c, Ian J. Wrench MD, PhD^d, Karin Pettersson MD, PhD^g, M. Shalabi MDⁱ, Amy Metcalfe PhD^b, R. Douglas Wilson MD, MSc^b





ERAS inom Gynekologi - obstetrik, sectio

- Två personer att ta hänsyn till.
- Sällan fastande
- Ofta akut
- Minimal-invasiv kirurgi ej möjlig
- Extra viktigt med värme
 - Modern som annan kirurgi
 - Barnet temperatur, Apgar, pH.
- Hemodynamisk speciell situation
 - Euvolemi → genomblödning av uterus, förhindrar syrebrist hos barnet
 - Overload - lungödem
- Regional anestesi
 - För återhämtning
 - För barnen
 - Risk för hypotension



ERAS inom Gynekologi

Utmaningar framåt

Vetenskapligt

- Fler studier av hög kvalitet
- RCT inom ERAS konceptet
- Renodlade studier i definierade populationer
ffa ovariancancer

Implementering

Rekommenderas av ESGO (European Society of Gyn Onc)

Fotopoulou et al. *European Society of Gynaecological Oncology guidelines for the peri-operative management of advanced ovarian cancer patients undergoing debulking surgery. IJGC 2021;31(9)1199-1206.*



ERAS inom Gynekologi Sverige

Rekommenderas i Nationella vårdprogrammet för ovariancancer.
Andra vårdprogram?

- Vi gör det där, åtminstone delar → Registrerade data
- Varför då? Patienterna går ju hem efter en dag....
- Inte aktiv del av ERAS familjen
- Nätverkande, utbyte av erfarenheter
- Forskning