

IL PERCORSO PERIOPERATORIO IN CHIRURGIA GENERALE UNA NUOVA PROPOSTA



Dott. Marco Scatizzi

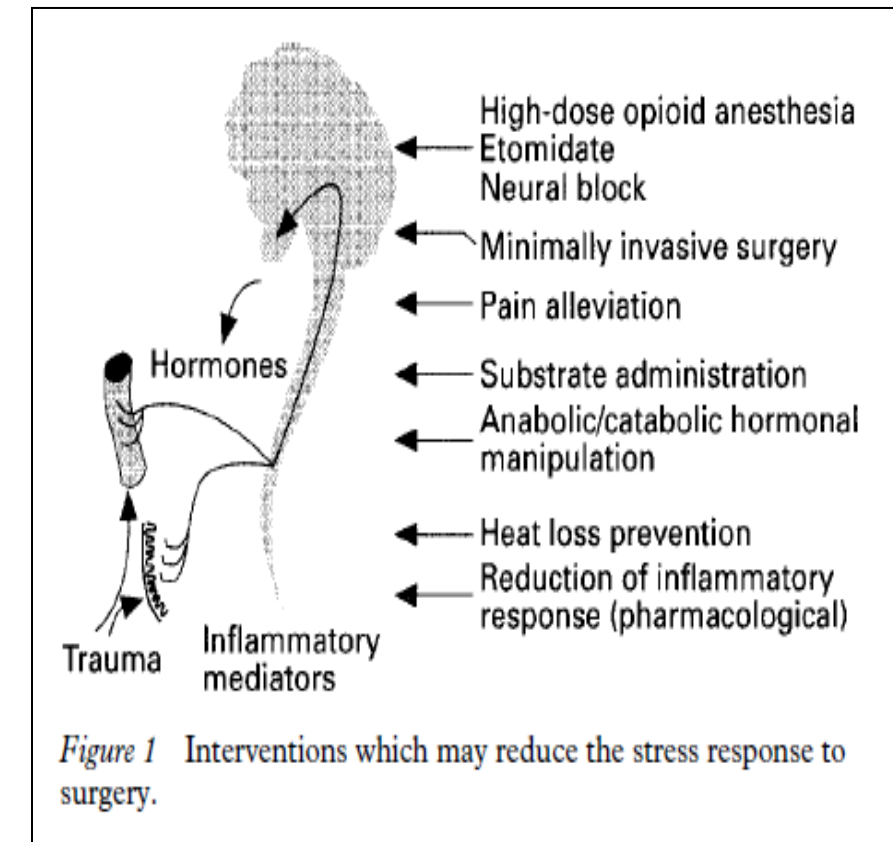
Direttore S.O.C. Chirurgia Generale Ospedale S.Maria Annunziata e Ospedale Serristori - Firenze USL Toscana Centro



British Journal of Anaesthesia 1997; 78: 606-617

Multimodal approach to control postoperative pathophysiology and rehabilitation

H. KEHLET



**OBJECTIVE:
 TO REDUCE
 SURGICAL STRESS**

H. Kehlet. British Journal of Anaesthesia 1997

Postoperative physiology and rehabilitation 611

Table 2 Common postoperative complications, their pathogenesis and prevention

Complication	Pathogenic factors	Interventions
Cardiac	Cardiac stimulation (surgical stress), hypoxaemia, fluid disturbances	Stress reduction (minimally invasive surgery, neural block, pain relief), oxygen administration, avoid heat loss and fluid overloading
Pulmonary	Impaired pulmonary and diaphragmatic function (surgical stress), pain, immobilization, fluid disturbances	Stress reduction (minimally invasive surgery, neural block, pain relief, physiotherapy, glucocorticoids), avoid supine position and fluid overloading
Thromboembolism	Altered coagulatory/fibrinolytic balance (surgical stress), immobilization	Antithrombotic prophylaxis, stress reduction (neural block, pain relief), mobilization
Cerebral dysfunction	Surgical stress, hypoxaemia, psychoaffective drugs, withdrawal syndromes	Stress reduction (minimally invasive surgery, neural block), oxygen administration, mobilization, avoid unnecessary opioid, psychoaffective drugs and development of drug withdrawal
Infection	Contamination, immunosuppression (surgical stress), hypoxaemia	Avoid contamination, use antibiotic prophylaxis, stress reduction (minimally invasive surgery, neural block), immunosupportive therapy, nutrition, oxygen administration, mobilization, remove catheters and drains as soon as possible, avoid necessary opioids, use antiemetics
Nausea and gastrointestinal dysfunction	Afferent stimulation (surgical stress), anaesthetics and opioid analgesics	Stress reduction (minimally invasive surgery, neural block, pain relief), avoid unnecessary opioids, use antiemetics
Impaired wound healing	Malnutrition, catabolism, (surgical stress), hypoxaemia, infection	Stress reduction (minimally invasive surgery), oxygen administration, mobilization, avoid infection, provide pre- and postoperative nutrition
Fatigue, reduced functional capacity and convalescence	Loss of muscle tissue and function, (surgical stress), immobilization and impaired cardiovascular adaptation to exercise, malnutrition	Stress reduction (minimally invasive surgery, neural block, pain relief), early oral nutrition and ambulation

**APPROCCIO
 SISTEMICO**


REVIEW

Evidence-Based Surgical Care and the Evolution of Fast-Track Surgery


Henrik Kehlet, MD, PhD, and Douglas W. Wilmore, MD†*


Annals of Surgery, 2008

ty, significant progress within the concept of
y has been achieved to document a combined
rative optimization and information, “stress-
y, efficient postoperative pain treatment, ad-
operative care principles to existing evidence,
e focusing on early mobilization and oral
ance recovery, decrease morbidity, and hos-
multidisciplinary approach requires further





Preoperative
Information
And
Teaching







Attenuation
of
Stress







Pain
Relief






Exercise





Enteral
Nutrition



ERAS... RESULTS

TABLE 4. Postoperative Data

	Laparoscopy and Fast Track (n = 100)	Open and Fast Track (n = 93)	Laparoscopy and Standard care (n = 109)	Open and Standard care (n = 98)	P
Overall morbidity < 30 days, No. (%)	34 (34.0)	43 (46.2)	37 (33.9)	41 (40.8)	0.20*
Patients with one or more major complications, No. (%)	15 (15.0)	18 (20.4)	12 (11.0)	21 (21.4)	0.19
Total no. of major complications	18	25	17	29	
Intraoperative complication	2	0	1	1 of which 1†	
Anastomotic leakage	7	8 of which 2†	6 of which 1†	7	
Mechanical ileus requiring reoperation	3	2	0	5	
Iatrogenic bowel perforation	0	2	2 of which 1†	1	
Abdominal wall dehiscence	0	6	1	3	
Other surgical complication‡	2	2	2	2	
Myocardial infarction	0	1	0	0	
Respiratory	2 of which 1†	2 of which 1†	2	4	
Infectious	0	2 of which 1†	3	3	
Cerebral vascular accident	1 of which 1†	0	0	2 of which 1†	
Acute tubular necrosis	1	0	0	1	
Patients with one or more minor complications, no. (%)	19 (19.0)	25 (26.8)	25 (23.8)	20 (19.4)	0.58*
Total no. of minor complications	36	46	43	43	
Prolonged postoperative ileus§	7	5	8	5	
Other surgical complication¶	2	2	2	2	
Wound infection	6	16	8	10	
Other infectious complication	8	11	9	14	
Urine retention	4	6	6	1	
Cardiac	3	4	3	3	
Central nervous system	4	2	4	4	
Renal failure	2	0	0	1	
Other	0	0	3	3	
Reoperations, no. (%)	10 (10.0)	13 (14.0)	11 (10.1)	18 (18.4)	0.24*
Readmission < 30 days, no. (%)	6 (6.0)	7 (7.5)	7 (6.4)	7 (7.1)	0.97*
In-hospital mortality, no. (%)	2 (2.0)	4 (4.3)	2 (1.8)	2 (2.0)	0.65*

RANDOMIZED CONTROLLED TRIALS

Laparoscopy in Combination with Fast Track Multimodal Management is the Best Perioperative Strategy in Patients Undergoing Colonic Surgery

A Randomized Clinical Trial (Lafa-study)



Vlung MS, Ann Surg 2011 Dec;254(6):868-7

“Optimal perioperative treatment for patients requiring segmental colectomy for colon cancer is laparoscopic resection embedded in a FT program. If open surgery is applied, it is preferentially done in FT care”.

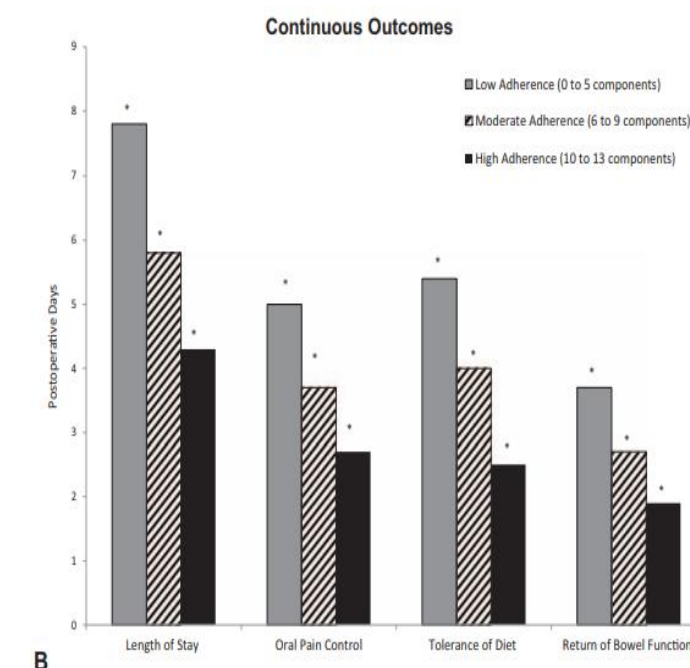
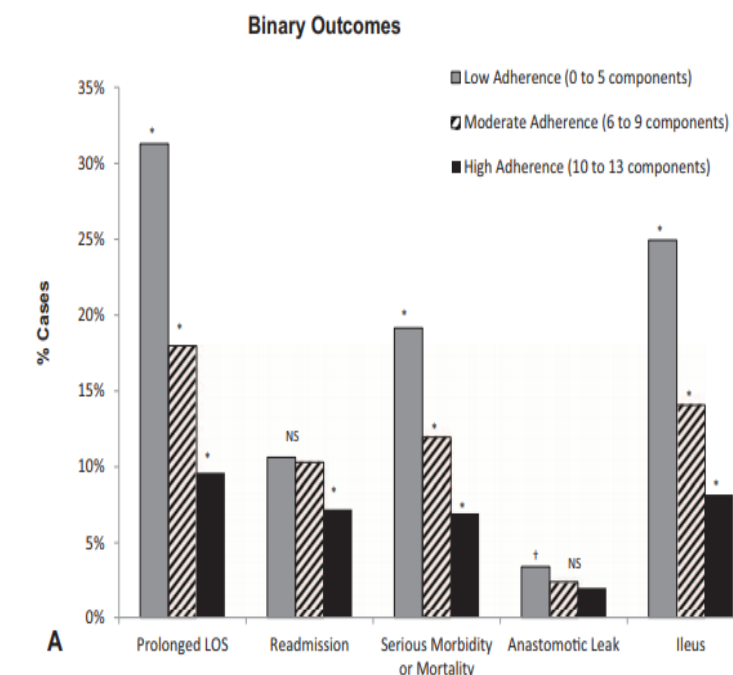
ORIGINAL ARTICLE

ERAS ADHERENCE... RESULTS

Annals of Surgery • Volume XX, Number XX, Month 2017

Adherence to Enhanced Recovery Protocols in NSQIP and Association With Colectomy Outcomes

Julia R. Berian, MD, MS¹; Kristen A. Ban, MD, MS¹; Jason B. Liu, MD, MS²; Clifford Y. Ko, MD, MS, MSHS¹; Liane S. Feldman, MD³; and Julie K. Thacker, MD¹



“In the largest to-date analysis of ERP adherence with outcomes, we find that increasing protocol adherence is significantly associated with decreased LOS and complications”

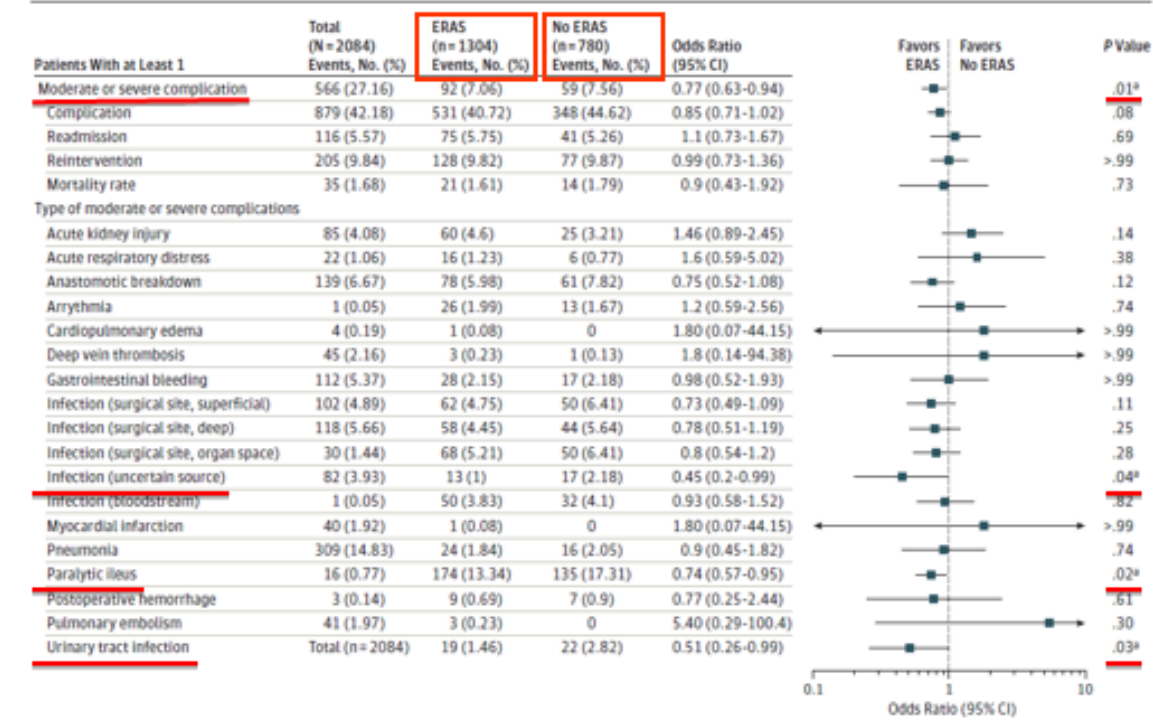
ERAS ADHERENCE P.O.W.E.R.

JAMA Surgery | Original Investigation
Association Between Use of Enhanced Recovery After Surgery Protocol and Postoperative Complications in Colorectal Surgery
 The Postoperative Outcomes Within Enhanced Recovery After Surgery Protocol (POWER) Study
Javier Ripollés-Meléndez, MD, José M Ramírez-Rodríguez, PhD, Rubén Cañas-Franco, PhD, César Aldecoa, PhD, Ana Abad-Molina, MD, Margarita Capellán-Espín, MD, José Antonio García-Era, PhD, Ángel Camps-Corralles, MD, Carlos Fernández-Crivel, PhD, Alejandro Suárez de la Haza, PhD, Ana Carolina Martínez, MD, Sandra Marimón-Monquillá, MD, Alfredo Abad-Guerrero, PhD, José M. Calvo-Veiga, PhD, for the POWER Study Investigators Group for the Spanish Perioperative Audit and Research Network (SPERAN)



2019

Figure 2. Postoperative Outcomes



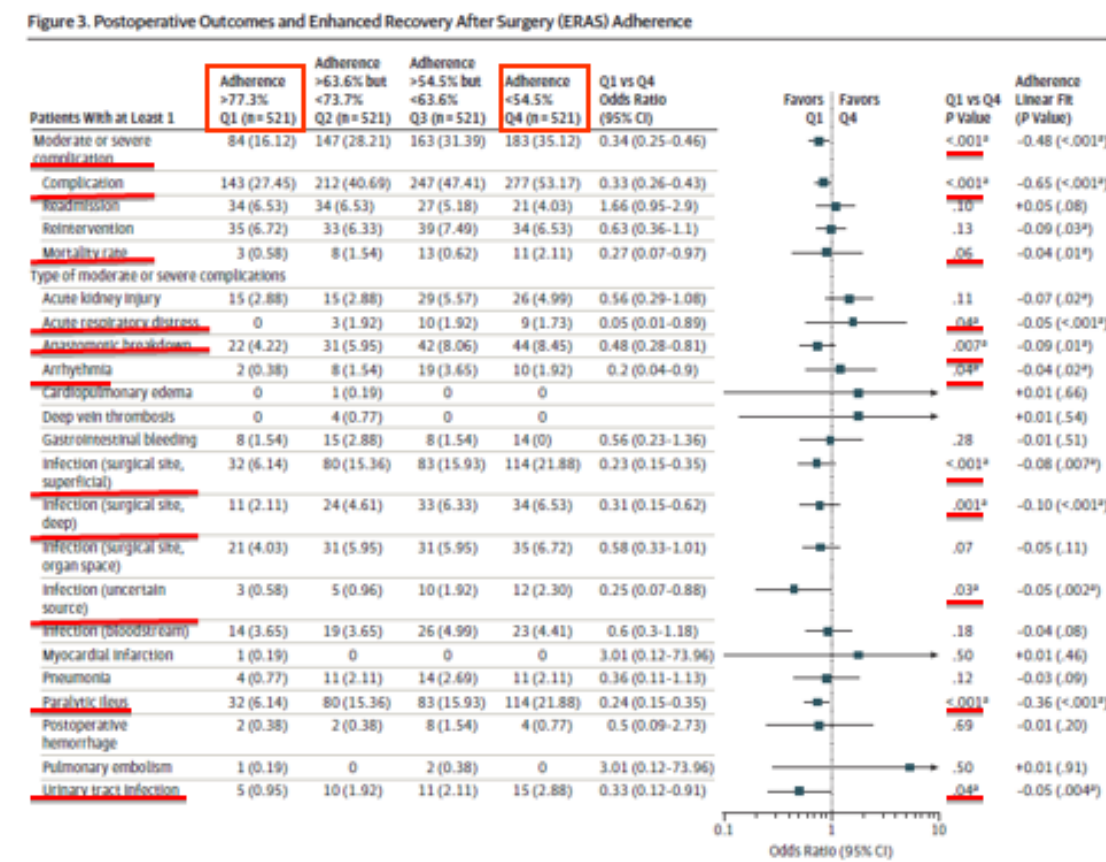
IMPORTANCE OF ADHERENCE **P.O.W.E.R.**

JAMA Surgery | Original Investigation
Association Between Use of Enhanced Recovery After Surgery Protocol and Postoperative Complications in Colorectal Surgery
 The Postoperative Outcomes Within Enhanced Recovery After Surgery Protocol (POWER) Study

Javier Ripollés-Medrano, MD, José M Ramirez-Rodriguez, PhD, Rubén Casero-Franco, PhD, César Albaladejo, PhD, Ana Abad-Motos, MD, Margarita Iguero-Espín, MD, José Antonio García-Esté, PhD, Rogelio Camps-Corremans, MD, Carlos Fernando Ordoña, PhD, Alejandro Suarez de la Rica, PhD, Ana Cuellar-Martínez, MD, Sandra Marmola-Mozgala, MD, Alfredo Abad-García, PhD, José M. Calvo-Veiga, PhD, for the POWER Study Investigators Group for the Spanish Perioperative Audit and Research Network (SPROCAR)



2019



**IL PERCORSO PERIOPERATORIO IN CHIRURGIA
GENERALE UNA NUOVA PROPOSTA**

Il Percorso ERAS non sempre va bene
ed il paziente può complicarsi quindi?
Chiamare il consulente internista?
Oppure.....

IL PERCORSO PERIOPERATORIO IN CHIRURGIA GENERALE UNA NUOVA PROPOSTA

Un recente studio retrospettivo statunitense, ha confrontato i tassi di mortalità a 30 giorni tra i pazienti oncologici che hanno ricevuto una valutazione preoperatoria da parte di un internista (gruppo IMPAC) con quelli che sono stati sottoposti direttamente all'intervento chirurgico senza tale valutazione (gruppo di controllo). Sono stati inclusi 11.577 pazienti sottoposti a intervento chirurgico, di cui 3.589 hanno ricevuto una valutazione preoperatoria dall'Internal Medicine Perioperative Assessment Center (IMPAC). Dopo correzione con propensity score match la probabilità di morte entro 30 giorni era inferiore tra i pazienti del gruppo IMPAC rispetto al gruppo di controllo (OR 0,39, IC 95%=0,18–0,84; $P < 0,001$)⁴

IL PERCORSO PERIOPERATORIO IN CHIRURGIA GENERALE UNA NUOVA PROPOSTA

In pazienti anziani con fratture dell'anca, la gestione condivisa non ha evidenziato differenze sostanziali nella sopravvivenza rispetto ai modelli di cura tradizionali, pur mostrando una riduzione dei tempi di intervento e della durata della degenza ospedaliera⁵. Allo stesso modo, uno studio prospettico randomizzato su pazienti sottoposti a protesi articolare ha rilevato una diminuzione delle complicanze minori, come infezioni urinarie, febbre e iponatriemia, senza però un impatto significativo sulle complicanze maggiori, sui costi del trattamento o sulla mortalità⁶

IL PERCORSO PERIOPERATORIO IN CHIRURGIA GENERALE UNA NUOVA PROPOSTA

Uno studio ha valutato 551 pazienti che hanno subito un intervento neurochirurgico, confrontando i risultati tra un gruppo di pazienti pre-intervento (gestiti con il modello tradizionale) e un gruppo post-intervento (gestiti con il modello di *co-management*). L'analisi si è concentrata sulle complicanze mediche, i tassi di riammissione e la mortalità intraospedaliera e a 30 giorni. I risultati hanno mostrato che sebbene vi sia stata una significativa riduzione delle complicanze mediche come ipertensione, iperglicemia e disturbi elettrolitici, nonché delle riammissioni per cause mediche a 30 giorni, non sono stati osservati miglioramenti rilevanti nella mortalità intraospedaliera e a 30 giorni⁷

**IL PERCORSO PERIOPERATORIO IN CHIRURGIA
GENERALE UNA NUOVA PROPOSTA**

Un Percorso condiviso collaborativo integrato
proposto da ACOI e FADOI



GRAZIE PER L'ATTENZIONE!

