

IMPROVING OUTCOMES AFTER MAJOR GYNAECOLOGICAL SURGERY

Jonathan Carter

MBBS, DipRACOG, FACS, FRANZCOG, MS, MD, CGO

SYDNEY GYNAECOLOGIC ONCOLOGY GROUP
SYDNEY CANCER CENTRE
ROYAL PRINCE ALFRED HOSPITAL
THE UNIVERSITY OF SYDNEY

Why

- **Minimally invasive surgery (MIS)**
- **Short term outcomes and LOS**
- **Conventional surgery (CS) with abdominal incision still required**
- **Aim to explore options to “narrow the gap” between MIS and CS**
- **Fast Track Surgery (FTS) or Enhanced Recovery After Surgery (ERAS)**

Fast Track Surgery Programs

- **Multifaceted approach to reduce catabolic stress responses associated with anaesthesia and surgery**
- **Flight and fight response activated**
- **Maintain normal physiology**
- **Not new, described by Kehlet in Denmark 2002**
- **World wide principles adopted by many specialties**
- **Numerous RCTs**
- **Victorian DOH, Cochrane & ASERNIP-S reviews**
- **Slow uptake in Australia**

Consequences of Conventional Care

- **Longer LOS...5-7 days**
- **Prolonged recovery**
- **Lower QoL**
- **Increased cost**
- **Increased morbidity**
 - **Venous Thrombo Embolism**
 - **Nosocomial infection**

Consequences of Fast Track Surgery

- **Reduction in stress response**
- **Reduction in organ dysfunction**
- **Decreased time for full recovery**
- **Resulting in:**
 - **Reduced perioperative morbidity**
 - **(Reduced LOS) (Cost saving !!!)**
- **Enhanced surgical recovery...better for the patient**

Development

- **Surgeon**
- **Anaesthetist**
- **Acute pain team**
- **Recovery room nurses**
- **Ward nurses**
- **Allied health**
- **Patient representative**

Original Article

Fast track surgery: A clinical audit

Jonathan CARTER, Rebecca SZABO, Wee Wee SIM, Selvan PATHER, Shannon PHILP, Kath NATTRESS, Stephen COTTERELL, Pinki PATEL and Chris DALRYMPLE

Sydney Gynaecological Oncology Group, Sydney Cancer Centre, Royal Prince Alfred Hospital, Sydney, Australia

Background: Fast track surgery is a concept that utilises a variety of techniques to reduce the surgical stress response, allowing a shortened length of stay, improved outcomes and decreased time to full recovery.

Aims: To evaluate a peri-operative Fast Track Surgical Protocol (FTSP) in patients referred for abdominal surgery.

Methods: All patients undergoing a laparotomy over a 12-month period were entered prospectively on a clinical database. Data were retrospectively analysed.

Results: Over the study period, 72 patients underwent a laparotomy. Average patient age was 54 years and average weight and BMI were 67.2 kg and 26 respectively. Sixty three (88%) patients had a vertical midline incision (VMI). There were no intraoperative blood transfusions. The median length of stay (LOS) was 3.0 days. Thirty eight patients (53%) were discharged on or before post op day 3, seven (10%) of whom were discharged on postoperative day 2. On stepwise regression analysis, the following were found to be independently associated with reduced LOS: able to tolerate early enteral nutrition, good performance status, use of COX inhibitor and transverse incision. In comparison with colleagues at the SGOG not undertaking FTS for their patients, the authors' LOS was lower and the RANZCOG modified Quality Indicators (QI's) did not demonstrate excess morbidity.

Conclusions: Patients undergoing fast track surgery can be discharged from hospital with a reduced LOS, without an increased readmission rate and with comparative outcomes to non-fast tracked patients.



Five Year Audit

- **2008-2012**
- **Laparotomy and conventional surgery**
- **Malignancy, suspected malignancy or complex benign gynaecological pathology**
- **No exclusions**
- **Unsanitised data...“the good, the bad, the ugly”**

Patient Characteristics

	N
Patients	427
Characteristics	
Age	54.8 yrs
Age <50	159 (37%)
Age 50-65	155 (36%)
Age 65-75	85 (20%)
Age >75	28 (7%)

Weight

	N
Weight	73.4 kg (Range 38-192)
BMI	28.1 (17-69)
Normal	167 (39%)
Overweight & Obese	260 (61%)
Overweight	123 (29%)
Obese	137 (32%)

Benign vs Malignant

Site	Benign	Malignant	Total
Ovary	116 (27%)	98 (23%)	214 (50%)
Corpus	42 (10%)	126 (30%)	168 (39%)
Cervix	14 (3%)	24 (6%)	38 (9%)
Other	1 (<0.5%)	6 (1%)	7 (2%)
Total	173 (41%)	254 (59%)	427

Tolerated EOF

Early Oral Feeding	N (%)
No	10 (2.3%)
Yes	417 (97.7%)

LOS

LOS	Days
Median	3.0 days
Mean	3.5 days
Patients D/C on Day 2	125 (29%)
Range	2-27 days

Safety

Quality Indicator	N=427 (%)
Ureteric injury	0
Wound dehiscence	0
Bowel injury	0
Vascular injury	0
Death <30 days post op	0
Anastomotic leak	0
Bladder injury	2 (0.5%)
Return to OR	2 (0.5%)
Venous Thrombo Embolism	4 (0.9%)
Unplanned ICU Admission	6 (1.4%)
Wound Infection	13 (3%)
Hospital readmission	16 (3.7%)

Readmission (16pts 3.7%)

Pt	Age	LOS	PS	BMI	Reason
MT	61	3	0	25	Planned TOV
LM	53	4	0	24	Cholecystitis
JV	79	6	1	26	Pancreatitis
MR	36	4	0	31	Dehydration 3 weeks PO
FM	85	3	2	27	Gastro 2w PO
BS	42	7	0	23	Constipation
AL	43	4	0	23	Constipation
NW	66	5	0	28	Constipation 10 D post CTX, 5W post op
LAF	41	2	0	31	Wound infection
LJ	46	2	0	29	Wound infection
DS	60	6	1	43	Wound infection
KS	49	5	0	33	Wound infection
AS	45	3	1	22	Wound haematoma
BB	61	3	0	40	Resuture vag vault
KR	61	16	0	30	JW. Exent. Bleed
RA	45	3	0	39	?SBO

What Can Be Achieved



- **39 yr old**
- **HT, diabetes**
- **Stage I uterine cancer**
- **Weight 123 kg**
- **BMI 46**
- **Day 1 post extended THBSO**
- **Suitable for D/C Day 2**
- **Discharged Day 3**
- **No complications**

Conclusions and Advice

- **Well tolerated**
- **Achievable in most**
- **Minimal morbidity**
- **Enhanced recovery**
- **Reduced LOS...cost saving**
- **Entire team needs buy in**
- **Start slowly**
- **Refer to: www.gynaecancer.org.au**