Bowel Injury in Gynaecologcial Surgery

Laura Miller

Intestinal Injury in Gynecological surgery: a ten year experience

- Retrospective analysis 1973-82
- Total of 128 cases of bowel injury
- 37% on entry
- 35% associated with adhesiolysis
- Equal regardless of mode of surgery
- 75% small bowel

- 72% at uncomplicated surgeries

Retrospective review 1984-2003

- Total of 110 cases of bowel injury
- 37.3% on entry
- 38.2% associated with adhesiolysis
- Equal regardless of mode of surgery
- 75.5% small bowel

FINHYST: Prospective Study of Hysterectomies and their complications

- 5279 hysterectomies reviewed
- No statistical significance between approach and organ injury
- Bowel injury was associated with adhesiolysis

Bowel Injury in Gynecologic Laparoscopy

- 10yr review
- 0.08% risk bowel injury in diagnostic and minor laparoscopic procedures
- 0.33% risk with major operative procedure
- Decreased incidence with increased surgical experience
- Perioperative diagnosis and immediate repair reduced likelihood of severe complications

Incidence of Complications during laparoscopy in patients with prior laparotomy

- 307 patients
- Complications occurred in 41 (13%)
- The majority were bowel injuries at 11.4% (35 patients)
- Predictive factors were prior
  - Abdominal myomectomy
  - Excisional endometriosis surgery

Incidence of adhesions after prior laparotomy

- 360 women undergoing laparoscopy after prior laparotomy
- Increased adhesions if:
  - Midline laparotomy for gynaecological reason
  - Supra-umbilical incision
- 21 (5.8%) had direct injury to omentum and bowel during their laparoscopic procedure

Summary

- Occurs most commonly with
  - entry to peritoneum
  - adhesiolysis
  - Previous surgery
- No difference in occurance with mode of approach (laparoscopic/vaginal/D&C)

What to do

- Awareness of risk
- Appropriate surgeon given risk
- Timely recognition and management

Bowel Injury at Hysterectomy

National Women's

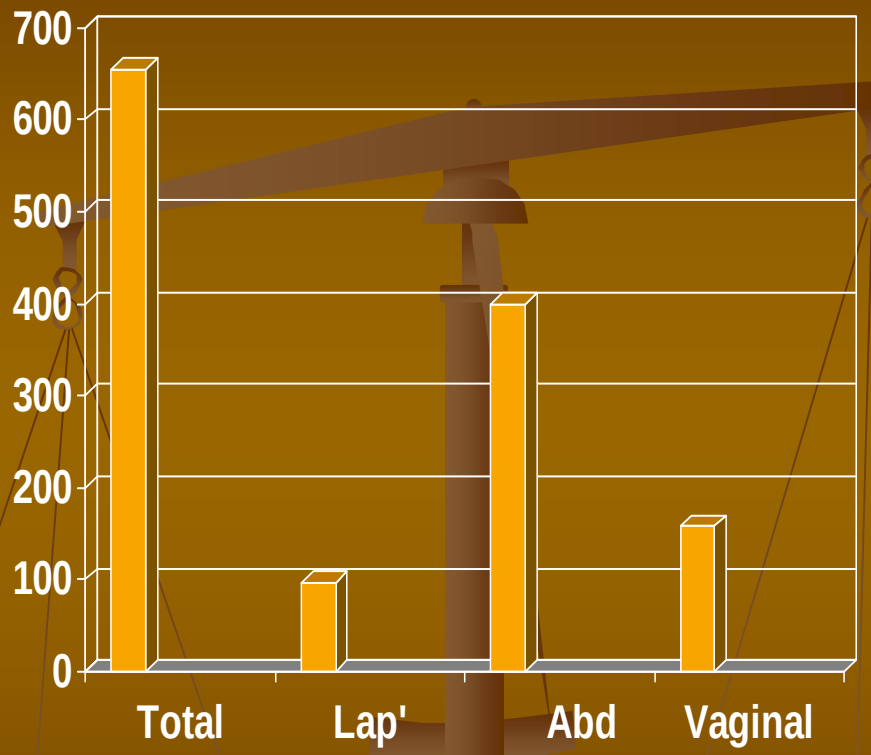
Data 2008 -2011 inclusive

Bowel Injury at Hysterectomy

- ACCESS database
- Women's Health Intelligence Unit
- All admissions and re-admissions cross referenced

Numbers

- 2008-2011
- **654 Hysterectomy procedures**
- 399 (61%) Abdominal
- 158 (24.2%) Vaginal
- 97 (14.8%) Laparoscopic



Intra-operative complications 2008-2011

	Total Hysterectomy	Laparoscopic Hysterectomy	Abdominal Hysterectomy	Vaginal Hysterectomy
n	654	97	399	158
Bladder Injury	4 (0.6%)	0	4 (1%)	0
Bowel Injury	6 (0.9%)	0	6 (1.5%)	0
Ureter Injury	3 (0.5%)	0	3 (0.8%)	0

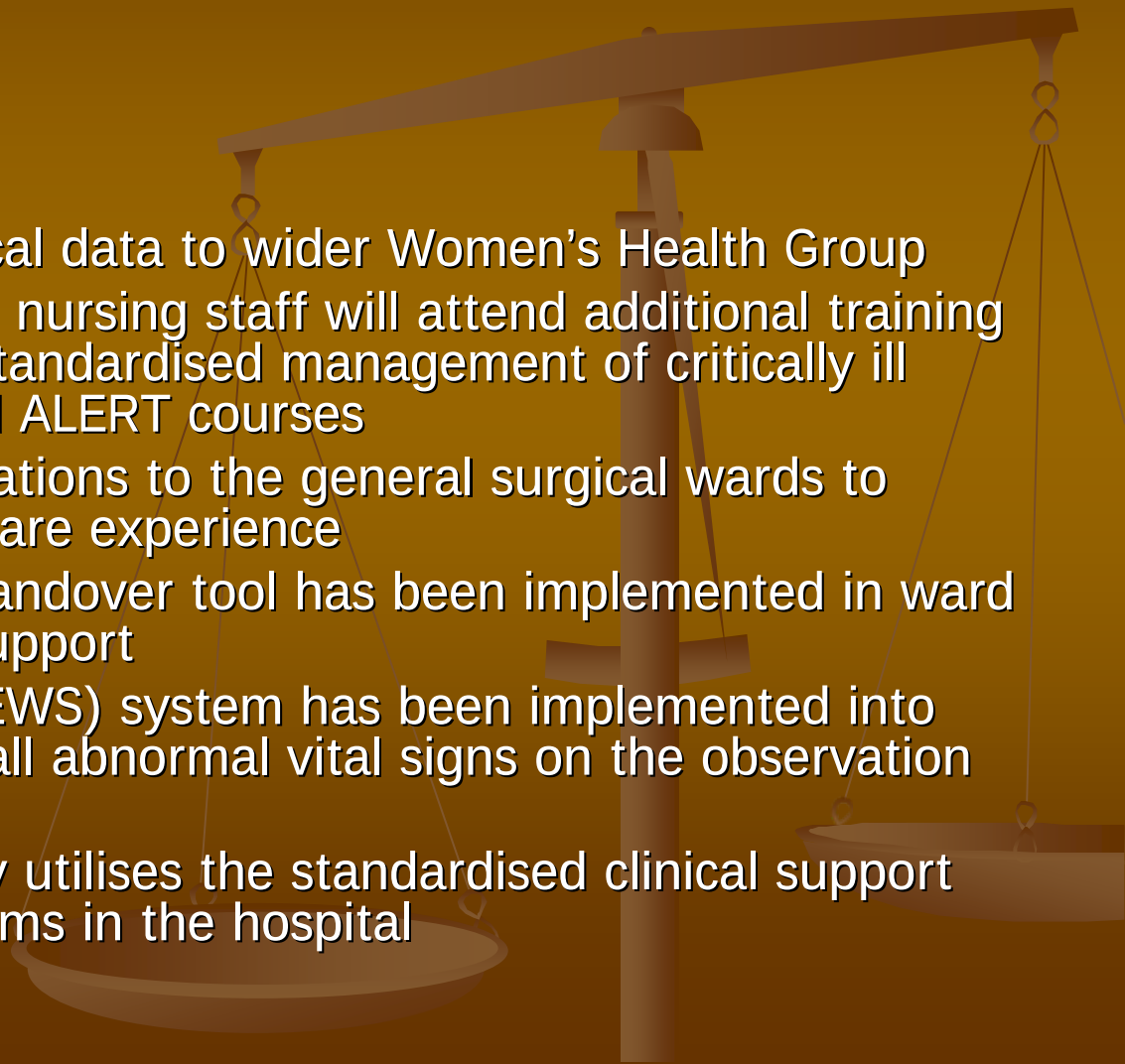
Bowel Injuries at Hysterectomy 2008-2011

- 6/654
- 5/654 Recognised immediately, primary repair, no long term consequences
- 1/654 (0.15%) - unrecognised

Bowel Injury at Hysterectomy

1. 50yo, Superficial Serosal Injury over caecum, at Pelvic Clearance for Endometrial Cancer. Recognised, primary repair, no sequelae
2. 52yo Hysterectomy for benign fibroids, adhesiolysis, gen surgeon called, sigmoid dissection resulted in injury, recognised, and primary repair, no sequelae.
3. 41yo Hysterectomy for Fibroids, Entry Injury to small bowel, primary resection, and primary re-anastomosis, no sequelae.
4. 67yo Pelvic clearance for complex mass and tortion, serosal injury to sigmoid colon, recognised, and repaired, no sequelae.
5. 40yo Hysterectomy for fibroids. Adhesions. Small bowel injury recognised and primary repair, no post op concerns.
6. 82yo, Large pelvic mass, Pelvic clearance, Bowel injury unrecognised at time of surgery. Delayed recognition and subsequent death. SAC1 completed. Several system and quality recommendations implemented since.

Key Outcomes from Peri-operative Mortality review



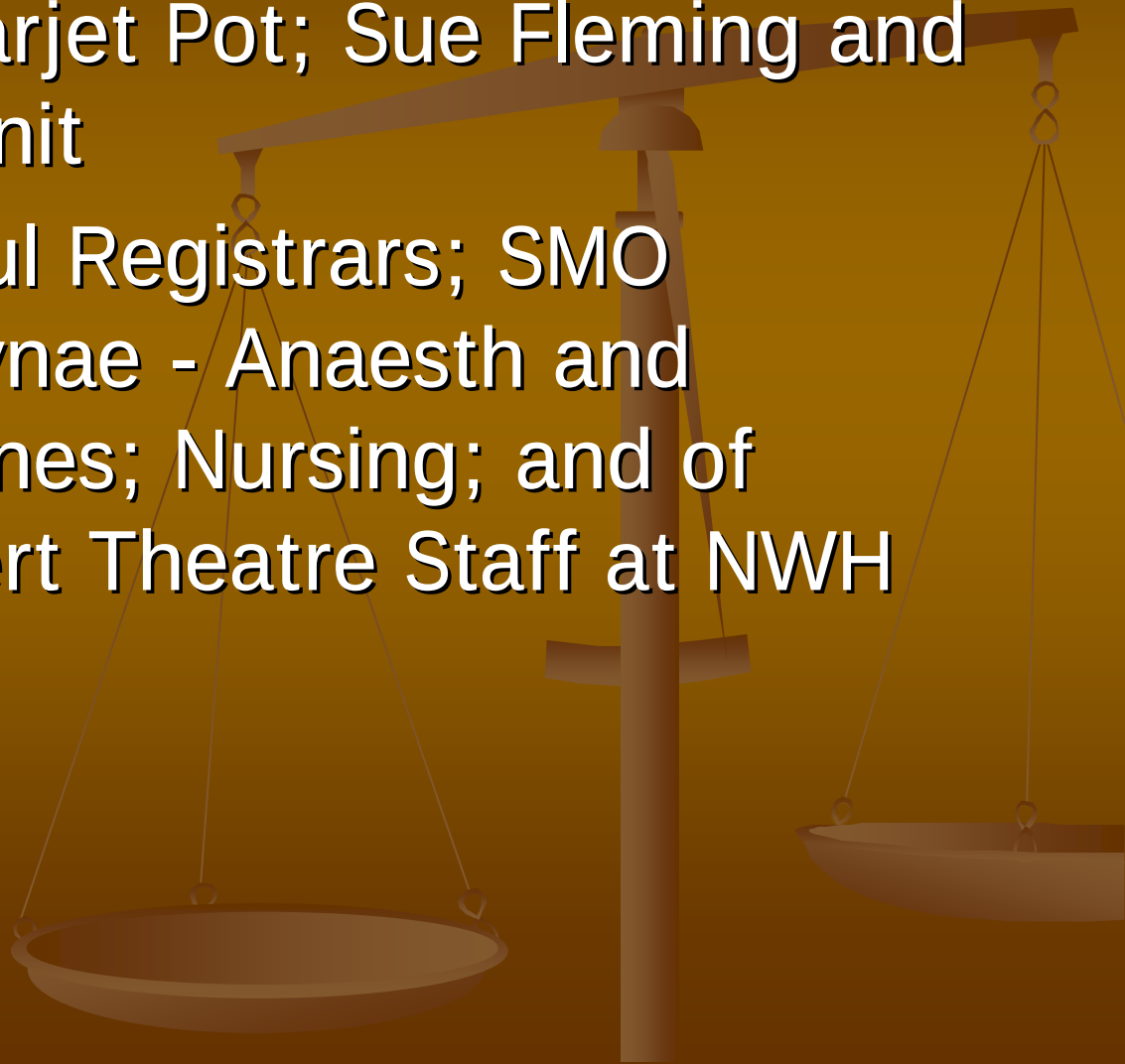
- Audit and present historical data to wider Women's Health Group
- Gynaecology medical and nursing staff will attend additional training on the recognition and standardised management of critically ill patients ----> CCrISP and ALERT courses
- Gynaecology nurses - rotations to the general surgical wards to enhance nursing critical care experience
- A standardised nursing handover tool has been implemented in ward 97, with education and support
- An early warning score (EWS) system has been implemented into ward 97 and charting of all abnormal vital signs on the observation sheet now occurs
- Ward 97 now consistently utilises the standardised clinical support and communication systems in the hospital

Summary

- Incidence of Unrecognised bowel injury at hysterectomy in this DHB is consistent with the international literature.
- Key is Risk selection, pre-operative planning, imaging, and timely communication with colleagues. Teamwork and planning improves outcomes.

Acknowledgments

- Lynn Sadler; Marjet Pot; Sue Fleming and Team at WHI Unit
- All the wonderful Registrars; SMO Colleagues – Gynae - Anaesth and Surgical Disciplines; Nursing; and of course the expert Theatre Staff at NWH



Questions and Comments??