

SWARM Post-Operative Regional Anaesthetic Techniques Survey

SPRATS



Bowel Cancer West | Registered Charity Number 1140271

SWARM: is a trainee led, consultant mentored, research network operating at all 6 NHS Trusts in the Peninsula Deanery.

Background: Epidural analgesia is considered to be the gold standard analgesic technique for major abdominal or pelvic surgery. However regional anaesthetic techniques supplemented with parental analgesics are increasing in popularity. SPRATS was designed to assess current practice throughout the South West Peninsula.

Study design: The SWARM team included Study Leads that designed the protocol and carried out centralized data management. Local Trust leads had responsibility for implementing the project at their individual trust, including recruiting data collectors. The project was registered as service evaluation / audit at each site. A pilot study was performed. A two-week snapshot study period was planned across all 6 trusts. We collected anonymised prospective data on all elective and emergency abdominal and pelvic operations in each hospital. Data completeness was assessed at each Trust by retrospective review of theatre lists. Local data on type of surgery and analgesic technique was transcribed onto a central database for analysis.

Overall data	Number	%
Total occurred	227.0	
Number collected	191.0	84.1%
Age (yrs)	61.4	+/-2.4
Weight (kg)	78.5	+/-2.5
Rectus sheath	47.8	24.8%
TAP	28.5	14.8%
Wound	47.8	24.8%
Spinal	22.6	11.8%
Epidural	45.9	23.8%
Surgeon	90.0	72.0%
Anaesthetist	35.0	28.0%
Ultrasound used	32.0	91.4%
Patient Controlled Analgesia (overall)	76.0	39.8%



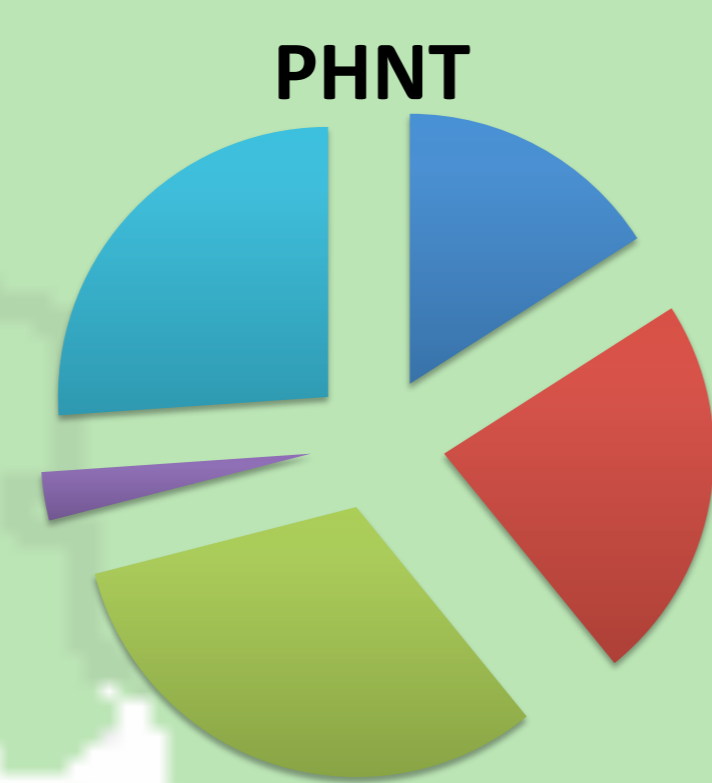
NDDH



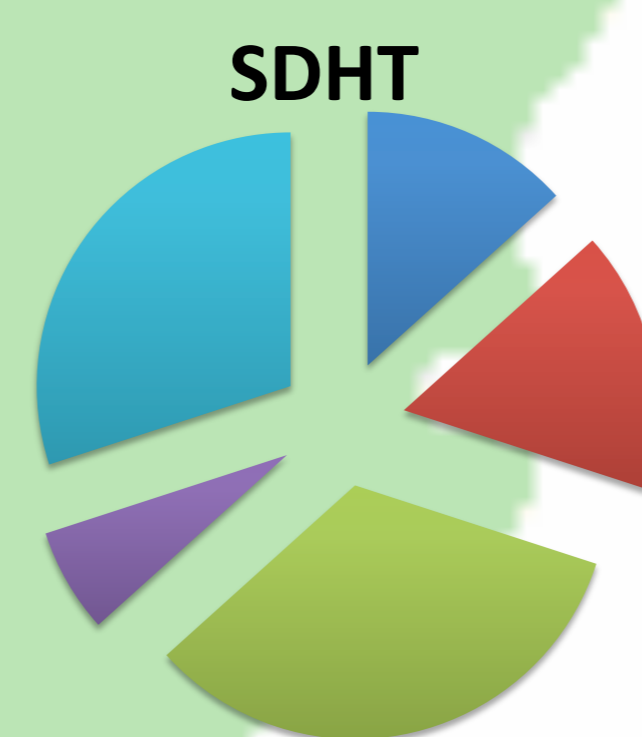
MPH



Exeter



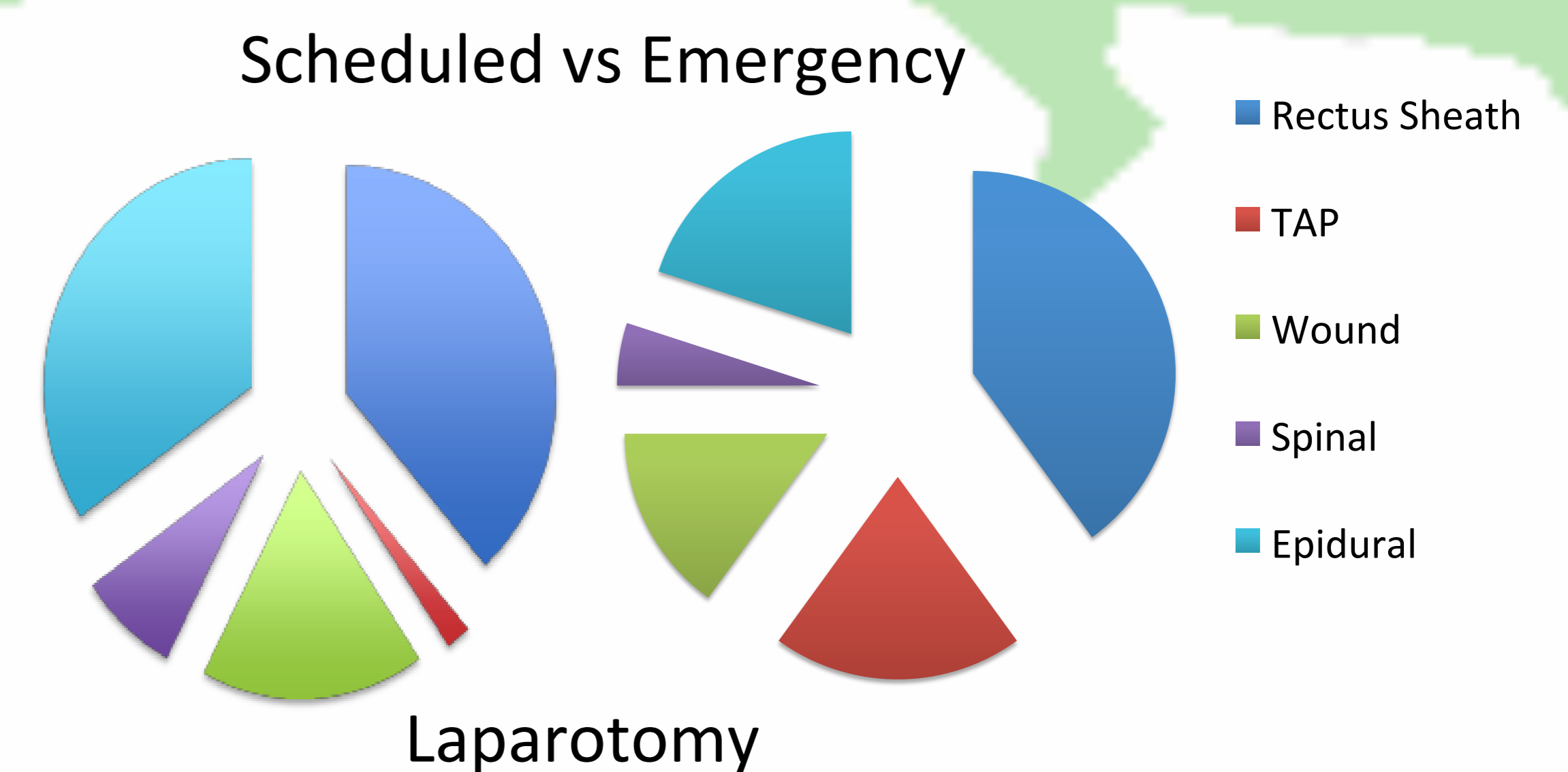
PHNT



SDHT



RCH



Scheduled vs Emergency

Laparotomy

Discussion

- The study achieved a good overall pick up rate of 84.1% and has produced data representative of practice within the South West.
- The study highlights the variation in practice within the South West region. For example rectus sheath catheters were used in 12.5% of cases in South Devon NHS Trust whereas 20 miles north at The Royal Devon and Exeter NHS Trust the same technique was used for 50% of cases. This variation in practice was not accounted for by casemix.
- As most patients with abdominal wall local anaesthetic techniques also have an opioid PCA (60-70%), some of the potential benefits of this approach over epidural analgesia may be lost.
- For elective midline laparotomy (n=54), epidural analgesia was employed in only one third of cases. Rectus sheath catheters were used in 37% of cases and of these, roughly half were combined with spinal anaesthesia.
- For emergency laparotomy (n=47), rectus sheath catheters accounted for a third of cases, and TAP block and wound infiltration a further third. In this patient group, epidural analgesia was used in 15%.
- Also of interest is the finding that 75% of abdominal wall catheters are sited by the surgeon.