

Appendix IIb

Surgical Procedures – an Australian experience

Prospective Audit of current use of Intraoperative Cell Salvage at the Royal Brisbane and Women's Hospital (RBWH), Brisbane, Australia – May to October 2012.

1. Procedures with most benefit from prospective observational study – RBWH:

Surgical speciality	Type of Procedure	Autotransfused units per case on average
General Surgery		
	Laparotomy +Liver laceration	2
Gynaecology		
	Uterine Myomectomy	4
	Total abdominal hysterectomy (TAH)	1
Obstetrics		
	Lower section caesarean section (LSCS) for placenta percreta	3
	LSCS for Placenta accreta	1
Orthopaedics		
	Multilevel (>3 level) posterior fusion	1
Urology		
	Radical Prostatectomy	1.85
Vascular		
	Abdominal aortic aneurism repair (AAA) elective	1.79
	AAA ruptured	2
	Re-implantation of renal artery	4

2. Procedures with lower but still significant, potential benefit from prospective observational study – RBWH:

Surgical speciality	Type of Procedure	Autotransfused units per case on average
Orthopaedic		
	Total Hip replacement	0.33
	Total knee replacement	0.25
Vascular		
	Aorto-bifemoral	0.56

3. Procedures that showed less cost-benefit from prospective observational – RBWH:

Generally significant blood loss could be expected from these procedures, however in the RBWH study it was found that these procedures did not present significant ICS cost- benefit.

Sub-speciality	Procedure type
General Surgery	<ul style="list-style-type: none"> • Trauma laparotomy Exploration • Splenectomy*
Gynaecology	<ul style="list-style-type: none"> • Total abdominal hysterectomy and bilateral salpingo-oophorectomy and tumor debulking
Neurosurgery	<ul style="list-style-type: none"> • Craniotomy • Craniotomy for pineal Tumour
Obstetric surgery	<ul style="list-style-type: none"> • Uncomplicated Caesarean section • Caesarean section for placenta previa grade 2,3 or 4 • Caesarean section for HELLP syndrome
Orthopaedic surgery	<ul style="list-style-type: none"> • Multi-trauma: acetabulum, rib and clavicle fractures • 1 to 2 level anterior spinal fusion • 1 level spinal disc revision • 1 or 2 level Interbody fusion • 1 to 3 level laminectomy • 1 to 3 level lateral fusion
Urology	<ul style="list-style-type: none"> • Open reduction internal fixation Acetabulum fracture • Nephrectomy

* Set up ICS device and wash salvaged blood when there is blood loss of greater than 20% of estimated blood volume.