

GUIDELINES FOR PREOPERATIVE BLOOD TRANSFUSION TESTING

Objective

To ensure patients have appropriate pre-transfusion tests performed before elective procedures, without unnecessary tests being performed

Guidelines Cross Match

Patients in whom transfusion is reasonably certain:-

- Aortic Surgery Placenta Praevia
- Hepatic Surgery Complex Hip replacements
- *Others on a per case basis*

Group & screen

Patients in whom urgent transfusion is possible (>1%)

- Cardiac Surgery (at JHH)
- Vascular (inc. Fistulas, but not Varicose veins),
- Complex Gynaecological Oncology Surgery
- Caesarean Section
- Major Abdominal Surgery but not uncomplicated right hemicolectomy
- Major Orthopaedic Surgery
- Multi-level spinal surgery or spinal tumours
- Major Head & Neck Surgery
- Thoracic Surgery
- Intracranial Surgery
- Major Urology but not uncomplicated TransUrethral Resections Of Prostate or Bladder

Not for Group & Screen

- Inguinal, Femoral or Incisional Hernia repairs
- Laparoscopic Cholecystectomy
- Colposuspension, Tubal Surgery etc
- Vaginal Hysterectomy
- Total Abdominal Hysterectomy (non-malignant)
- Laminectomy/Discectomy
- Thyroidectomy

and any other procedure unless there is a specific reason to require Group & Screen

Group & Screen validity is determined by local policy – commonly 7 or 28* days from the date of sampling, unless a transfusion has been given within the last 3 months, or during or within 3 months of pregnancy (then it is only valid for 72 hours). Note: Group & screen for neonates are valid for 4 months

- ***28 days validity only applies if the patient is clearly identified as “pre-operative” on the request form and the request form clearly indicates no recent transfusion or pregnancy within 3 previous months).**

Rationale

- “Cross Matching” and/or patient specific allocation of blood should be minimised as it impedes the efficient use of the donor blood supply. It has become less necessary with the development of the eBlood (Electronic Transfusion System), particularly in the central hospital setting.
- Pre-operative Group and Screen is of use to facilitate rapid release of blood where unexpected blood loss occurs, and to identify the uncommon patient with antibodies or unusual blood group. This advantage comes at a cost of patient inconvenience and discomfort, staff time, and the cost of the test.
- If blood has not been collected for G&S, and G&S becomes necessary, a new specimen must be collected and tested. In the major hospital setting (e.g. JHH, Mater, Maitland, Manning & Tamworth), the response time and availability of blood stocks to match unusual patients is such that pre-operative group & screens are less necessary.

Exception/ Issues

The above guidelines may need to be modified for hospitals without an on-site transfusion laboratory or remote release station. They may also be modified where the surgery or patient factors make transfusion more (or less) likely. Special considerations apply for neonates

References **The National Blood Authority Website contains extensive resources about blood transfusion.** *Based on Guidelines developed at – John Hunter Hospital*