

## **1. Introduction and Who Guideline applies to**

This guideline is for medical teams caring for patients with bleeding disorders who are due for an intervention or surgical procedure.

## **2. Guideline Standards and Procedures**

The management of surgical and dental procedures for people with bleeding disorders must be approached with care and should involve multi-disciplinary team (MDT) discussion and excellent communication between those involved. Typically the MDT would include: operator, operator nursing team lead, haemostasis team, laboratory and patient. The patient's GP should be kept informed at all times.

In order to successfully manage haemostasis in for people with bleeding disorders, the following should be identified and assessed:

- Date/time/location of procedure
- Bleed risks associated with the procedure; ideally as assessed by the operator but see also appendix 1 for bleed risk assessment for surgical procedures and appendix 2 for dental procedures.
- Patient's bleed risk (i.e. diagnosis of bleeding disorder)
- Details of the recovery period. This includes length of in-patient stay, patient support at home, patient ability to self-treat with IV injections if necessary

Once planned, the MDT should follow the procedure below:

1. Surgical/dental team inform haemostasis team of the procedure. Required details include: name of procedure, planned time and date, location, mode of anaesthesia.
2. Haemostasis team to draw up a plan for peri-operative haemostasis (see template in appendix)
3. Haemostasis team to discuss and sign off plan at haemostasis MDT meeting (or sooner depending on urgency); then send plan to surgical team, haemostasis MDT, patient, + laboratory (if specialist tests required)

The haemostasis team will be responsible for ensuring action points from the peri-operative plan. This might include: supply of factor to ward nursing teams, education regarding factor administration, coordinating post-procedural blood samples and their delivery to the special haematology laboratory, consideration of venous access and post procedural home treatments.

Important considerations for the haemostasis team:

- Have inhibitors or anti-platelet antibodies been considered and excluded pre-operatively?
- Day/time of procedure: earlier in the day and earlier in the week are preferable when considering staff and laboratory availability in the post-procedure setting.
- Is there sufficient availability of haemostatic agent required for this patient?

- How and where will haemostatic agents be given in the early post operative period? Can these be given at home with the help of an indwelling venous catheter for example?

Specific therapies are beyond the scope of this guideline and management plans are to be highly individualised in order to mitigate risks.

A copy of the template used for haemostasis management is enclosed in appendix 3 of this document.

The plan should contain information with specific instructions about timing, dosages and responsibilities for these treatments.

### **3. Education and Training**

Nil

### **4. Monitoring Compliance**

<b>What will be measured to monitor compliance</b>	<b>How will compliance be monitored</b>	<b>Monitoring Lead</b>	<b>Frequency</b>	<b>Reporting arrangements</b>
Review of procedural success	Adherence to plan; bleed rates	Haemophilia MDT	3m	MDT minutes

### **5. Supporting References (maximum of 3)**

If None say NONE

### **6. Key Words**

Haemophilia, von willebrand disease, platelet function disorders, bleeding disorder, perioperative management, clotting factor, coagulation factor, factor deficiency

<b>CONTACT AND REVIEW DETAILS</b>	
<b>Guideline Lead (Name and Title)</b> Dr Richard Gooding	<b>Executive Lead</b>
<b>Details of Changes made during review:</b>	

## **Appendix 1. Procedural bleed risks when considering management of bleeding disorders**

**High bleed risks**; requiring maintenance of higher factor levels for a longer duration:

Major surgery: penetration/exposure of a body cavity, extensive tissue resection

### **All major surgery**

### **All vascular surgery**

### **All cardiac/cardiothoracic surgery**

### **Cardiovascular**

Pacemaker or defibrillator placement Coronary intervention and angiography Electrophysiologic testing/ablation

### **Ophthalmologic surgery**

Peri-orbital surgery Vitreoretinal surgery

### **ENT**

Any sinus surgery

Biopsy or removal of nasal polyps Thyroidectomy

Parotidectomy

Septoplasty Turbinate cautery

### **Dental** (see also appendix 2)

Reconstructive procedures

### **Orthopaedic**

Arthroplasty

Arthroscopy

Joint replacement surgery Shoulder/hand/foot surgery Spinal surgery

### **Gynaecologic surgery**

Hysterectomy Bilateral tubal ligation Laparoscopic surgery Cancer surgery

### **General surgery**

Surgery on spleen, liver, kidney Bowel resection

Laparoscopy

Abdominal hernia surgery Laparoscopic cholecystectomy Lymph node biopsy

Haemorrhoidectomy

### **Gastroenterology**

Polypectomy

Percutaneous endoscopic gastrostomy

Percutaneous liver biopsy

Endoscopic Ultrasound with fine needle biopsy,

Endoscopic biliary or pancreatic sphincterotomy Variceal banding

### **Urology and renal**

TURP

Bladder resection of tumour

Kidney biopsy

Extracorporeal shock-wave lithotripsy

### **Neurosurgery/neuraxial procedures**

All procedures including lumbar puncture and myelography

### **Interventional radiology**

Percutaneous transhepatic cholangiography or nephrostomy Percutaneous drainage of liver abscess or gall bladder

Organ biopsy

Hickman and tunnelled dialysis catheter placement

### **Respiratory**

Chest tube placement

**Low bleed risks;** may require haemostatic intervention but at a lower intensity and for a shorter period of time

Minor surgery e.g. skin

Endoscopies without biopsy

Simple dental extraction

Minor dermatological procedures Excision of:

Basal and squamous cell skin cancers

Actinic keratoses and pre-malignant or cancerous skin naevi

Dental\*\* Dental fillings Dental cleaning

Single dental extraction

Restorations Prosthetics, endodontics

Ophthalmology Cataract extraction

Gastroenterology

Diagnostic endoscopy, with or without biopsy ERCP without sphincterotomy

Urology

Cystoscopy without biopsy

ENT

Diagnostic fiberoptic laryngoscopy or nasopharyngoscopy Fine needle aspirate

Vocal cord injection

Gynaecological procedures Diagnostic hysteroscopy, colposcopy Insertion of intrauterine device

**Appendix 2. Bleed risks and management suggestions for dental procedures in the context of haemophilia and bleeding disorders**

Procedures typically <b>requiring</b> factor replacement/haemostatic support. Consider additional tranexamic acid.	Procedures typically <b>not requiring</b> specific haemostatic support. Consider tranexamic acid.
Inferior dental block	Buccal infiltration
Lingual infiltration	Intra-papillary injection
	Intra-ligamentary injection
Dental extraction(s)	
Implants/complex procedures	Scaling and polishing
	Orthodontic assessment/fitting
	Root canal

Appendix 3. Template for peri-operative management for a patient with a bleeding disorder

HAEMOPHILIA CENTRE, LRI (Ext. 6500)

**PROCEDURE TREATMENT PLAN – PATIENTS WITH A BLEEDING DISORDER**

HOSPITAL No:

NAME:

ADDRESS:

DOB:

DIAGNOSIS (include presence of inhibitors, allergies, intolerances and response to treatments as appropriate):

Weight:

Gender:

**PROCEDURE PLANNED**

PROCEDURE	OPERATOR	DATE /TIME	LOCATION	ANAESTHES

**TREATMENT PROTOCOL to be administered by Haemostasis team**

**NB. DO NOT GIVE ASPIRIN, NSAIDS or IM INJECTIONS**