



PROCEDURE

SUBJECT: Factor VIII and Factor IX Administration for patients with Haemophilia

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All Clinical Areas JHCH

PERSON RESPONSIBLE FOR MONITORING AND REVIEW:

Oncology/Haematology Team

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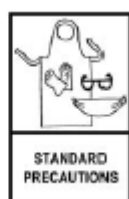
KGNS Quality Committee

Disclaimer:

It should be noted that this document reflects what is currently regarded as a safe and appropriate approach to care. However, as in any clinical situation there may be factors that cannot be covered by a single set of guidelines, this document should be used as a guide, rather than as a complete authoritative statement of procedures to be followed in respect of each individual presentation. It does not replace the need for the application of clinical judgment to each individual presentation. Consider specialist consultation.

S.W.P.

SAFE WORK PRACTICE



OVERVIEW:

Haemophilia patients should continue to present to the Mater Calvary Hospital between the hours of 0800-1700.

This procedure has been written to guide the preparation and administration of Factor VIII and IX in children who require this intervention as the result of an injury, rather than for the routine management of their haemophilia.

The parents/caregivers of haemophilia patients should now phone the on-call registrar through the switchboard between the hours of 1700-0800 unless they are experiencing severe pain or haemodynamic compromise, in which case they should present directly to the nearest Emergency Department (ED). The registrar will assess the situation and advise the parents either to present to J1 or ED (See Appendix 1).

Each child will require a careful assessment of the observations and frequency of observation required to manage their injury.

OUTCOMES:

- The correct patient receives the correct Factor VIII or Factor IX
- The Factor VIII or Factor IX is given via the correct route.
- The correct brand of Factor VIII or Factor IX will be administered
- The administration of the Factor VIII or Factor IX will be in accordance with infection control measures to reduce the risk of infection
- The administration of the infusion is in accordance with the medical order.
- Documentation of the transfusion is noted on the fluid balance chart in the History, Examination and Progress Notes and transfusion request form

What is Haemophilia?

Haemophilia is a blood clotting disorder in which one of the essential clotting factors is deficient.

Treatment is given by injecting the missing clotting factor into veins.

With appropriate treatment, haemophilia can be managed effectively.

Haemophilia A (or Classical Haemophilia)

Is the most common form, and is due to the deficiency of Factor VIII (8)

Coagulation Factor VIII are either Recombinant or Plasma-derived:

- **Advate®** (Baxter) and **Refacto®** (Wyeth) **Recombinate®** (Baxter) Are the current available brands of recombinant factor VIII used to treat patients with haemophilia A
- **Biostate®** is the plasma-derived factor VIII that contains Von Willebrand factor

Haemophilia B (or Christmas Disease)

Is due to the deficiency of Factor IX (9)

Coagulation Factor IX are either Recombinant or Plasma-derived:

- **Benefix®** (Wyeth) Is the current available brand of recombinant factor IX used to treat patients with haemophilia B
- **Monofix®** is the plasma-derived factor IX.

Single dose of Factor VIII or IX

- When the parent of a child with haemophilia contacts the ward, page the Paediatric Oncology Registrar or Paediatric Oncologist/ Haematologist on call.
- Patients may arrive to the ward with ampoule of Factor VIII or Factor IX that will require reconstitution prior to administration.
- Patients may arrive to ward without their ampoule of Factor.
- JHH Blood Bank keep a limited supply of Factor VIII and IX
- The Calvary Mater has a larger supply of Factor VIII and IX and Calvary Mater Haematology (on-call 24hours) can be contacted via switch on 11211.

Procedure for bolus dose Factor VIII and IX

- Verify that the medical order/ prescription clearly states type of Factor VIII or Factor IX and brand to be administered.
- Verify informed consent documented on blood product consent form HNEMR17.
- Explain procedure to patient and possible reactions
- Always read the product information contained in the box or at the website before commencing
- Prepare a cleaned flat surface to prepare the Factor VIII or IX
- Attend hand hygiene and DON gloves and protective eyewear
- Reconstitute the Factor VIII or IX
- All product batch numbers must be documented in the patient's medical record. Some products have a peel off label making documentation easy
- Medical officer to insert butterfly needle
- Verify the five rights of medication administration
- Administer bolus dose of Factor VIII or IX.

The following websites provide important information regarding the preparation and reconstitution technique required for Factor VIII or IX:



http://www.hemophiliavillage.com/refacto_r2.asp



http://www.advate.com/images/pdf/prescribing_info_english.pdf



<http://www.benefix.com/infusion-directions.aspx>

Continuous infusions

Continuous infusions of Factor VIII and Factor IX are indicated if the patient with Haemophilia has a major bleed, pre-operatively or at the request of the Oncologist/Haematologist

Medical officer to contact The Calvary Mater to reconstitute the Factor and send to JHH Blood Bank

The labeled 50ml syringes will be available from JHH Blood Bank and can be obtained **one**(1) at a time

Administered via a syringe driver

No filtering is required

Procedure for continuous infusion:

Verify that the medical order/ prescription clearly states type of Factor VIII or Factor IX and brand to be administered.

Verify informed consent documented.

Explain procedure to patient and possible reactions.

- When cannulation has occurred and factor prescribed, **only one** (1) syringe of Factor may be collected from JHH Blood Bank at a time
- Prepare a clean surface
- Attend hand hygiene and DON gloves and protective eyewear
- Prime the syringe driver giving set with the factor
- Place in syringe driver
- Check the Factor with a second medication accredited staff member
- Attend five rights of medication administration
- Connect to cannula via luer lock interlink connector
- Infuse at the prescribed rate
- Batch number of all ampoules, are a legal requirement and must be placed on the white transfusion sheet.

Observations

- Baseline Temperature, Pulse, Respirations and Blood Pressure then according to the requirements of the injury.
- Bolus doses are administered under constant visual observation.
- Fluid balance chart to be used for continuous infusions.
- Observe for signs of adverse reaction and tissue infiltration by checking cannula site hourly.

Reactions

Symptoms may include:

- Skin rash
- Itching
- Tightness in the chest
- Shortness of breath or wheezing

Reactions are usually mild and can be relieved by taking antihistamines

If a reaction does occur STOP the infusion immediately, assess vital signs, notify the medical officer and provide emergency care as required.

Complete an IIMS and inform JHH Blood Bank.

At the completion of the infusion

- Document procedure in the patient's medical record, and on a fluid balance chart and transfusion request form
- When cannula/ butterfly needle is removed, apply pressure to site until bleeding has completely stopped.

REFERENCES:

<http://www.haemophilia.org.au/>

<http://www.advate.com.au/easeofuse.html>

Flippin Blood, (2006) First Edition, August.

<http://www.wfh.org-en-pdf-english.pdf.url>

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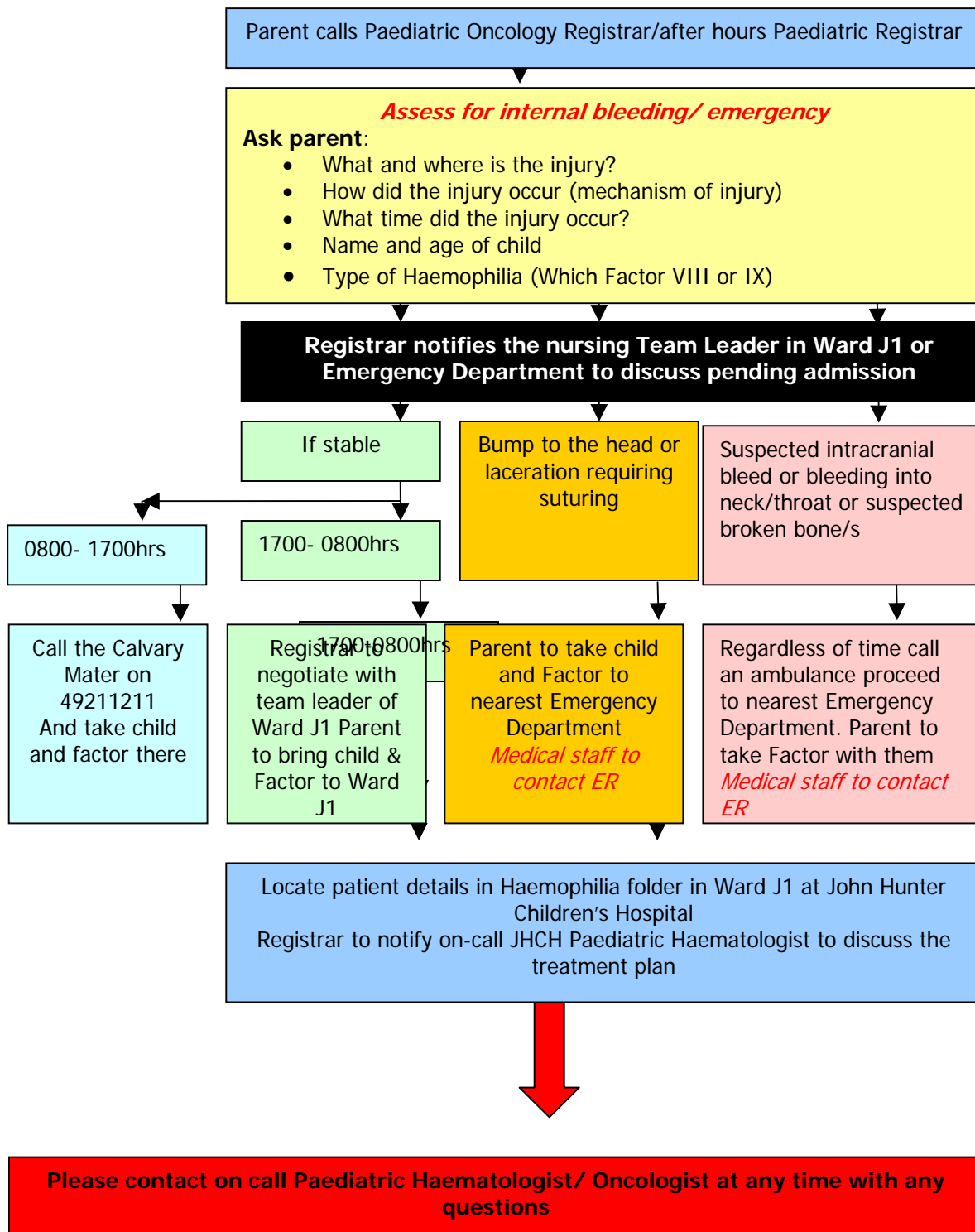
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Kaleidoscope CPGAG approval September 7th 2009

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APPENDIX 1:

Haemophilia Telephone Triage Tool



July 24th 2009

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