PAEDIATRIC ACUTE CARE GUIDELINE	
Post Tonsillectomy Haemorrhage	
Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

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Post Tonsillectomy Haemorrhage

Background

General

- Post tonsillectomy bleeding is an uncommon, but potentially devastating event
  - The main difficulties arise from airway obstruction and hypovolaemic shock
- The risk is reduced if on antibiotics, adequate oral intake and adequate analgesia
- Haemorrhages can occur in 1-2% of operations (less in paediatric than in adult cases)
  - Primary (most common) – within 24 hours and rarely dealt with in ED
  - Secondary – from 24 hours to 14 days post operation, most commonly 6-10 days
- At PMH, approximately 20% of patients will go to the operating theatre from the ED. From those who go to the ward directly from ED approximately 7.5% will have further bleeding requiring theatre.

Assessment

- Management of bleed occurs concurrently with history and examination
- Bleeding is often occult in children as they swallow blood rather than spit it out
- The amount of blood loss is usually more than you estimate
- Children can tolerate blood loss up to a certain point then will decompensate

History

- Timing of operation
- Analgesia given (especially if ibuprofen or aspirin has been given)
- Past history, especially of bleeding disorders
- Intercurrent illnesses, especially URTI or other febrile illnesses
- Estimated amount of blood observed to be lost

Examination

- Calm manner and reassuring tone (for parents and child)
- Heart rate, respiratory rate, blood pressure, capillary refill, pallor, fever
    - If prolonged central capillary refill or low BP, then major blood loss has already occurred
    - Watch pulse changes closely – beware of an increasing tachycardia
- Look at the back of the throat (within limits of patient cooperation) for signs of active bleeding and/or clot

Management

- Potentially life threatening event
- Contact the ENT registrar +/- anaesthetics as soon as condition is recognised
- For patients being transferred, ETA should be determined and ENT made aware of time they are needed
- Transferred patients may need a medical escort from the transferring hospital

Initial management

- Manage patient in resuscitation bay or appropriate high acuity area
- Early intravenous access
    - Aim to put in a large cannula if possible but any access is better than none
    - IO access if no IV access can be obtained
- Make preparations for a second IV line to be inserted (waiting for Emla® is acceptable if stable)
- Obtain bloods for:
    - FBC - baseline Hb and platelets (this may not be representative of blood loss)
    - Coagulation profile and von Willebrand's screen (for unrecognised coagulopathy)
    - Group and Hold +/- crossmatch (depending on severity of symptoms/signs)
        - Inform blood bank if ongoing bleeding or unstable patient
- IV fluids: 10-20mL/kg boluses of 0.9% saline to correct physiologic parameters
- If unstable, give packed cells (O negative/group specific)
- Apply co-phenylcaine spray to the oropharynx or adrenaline 1:10 000
    - Apply a swab held in artery forceps or similar instrument to an area of bleeding or over the tonsillar beds and push laterally not posteriorly (requires cooperation of patient and skilled operator)
- Administer intravenous tranexamic acid
    - DDAVP may also be given on advice of ENT or senior ED doctor
- Further treatment of bleeding in the pharynx such as removal of clot and cautery (e.g. silver nitrate) needs to be done by a skilled individual (i.e. experienced doctor or ENT registrar/Consultant)
- Keep NBM
- Allow to sit upright, leaning forward if necessary (to help keep blood out of airway)
- Intubation in an emergency is extremely difficult and should be done by the most experienced airway doctor available in the hospital

Admission criteria

- All post tonsillectomy bleeding will need admission for

observation or operating theatre

Nursing

- If airway, breathing or circulation is compromised move the patient to the resuscitation room and activate the resuscitation team
- Set up for insertion of two IV cannula
- Prepare 0.9% saline IV infusion
- Ensure rapid infusers are on hand
- If initially well, apply Emla® on arrival

Observations

- Heart rate, respiratory rate and effort, blood pressure, capillary refill, pallor and neurological observations
- Monitor closely
    - A minimum of hourly observations are required

Tags

adrenaline, bleed, blood, blood disorder, clot, clots, co-phenylcaine, ent, haemorrhage, occult, post-tonsillectomy haemorrhage, spray, surgical, throat, tonsil, tonsillectomy, tonsils

References

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• Price R, Donaghy K and King B. Post tonsillectomy haemorrhage: Experience in a Paediatric Emergency Department. Poster presentation - Child and Adolescent Health Research Symposium October 2014, PMH

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