

Nursing Care and Treatment of Difficult Ulcerated Haemangiomas

Jane Linward and Samira B Syed. Dermatology Department, Great Ormond Street Hospital for Children NHS Trust, London UK

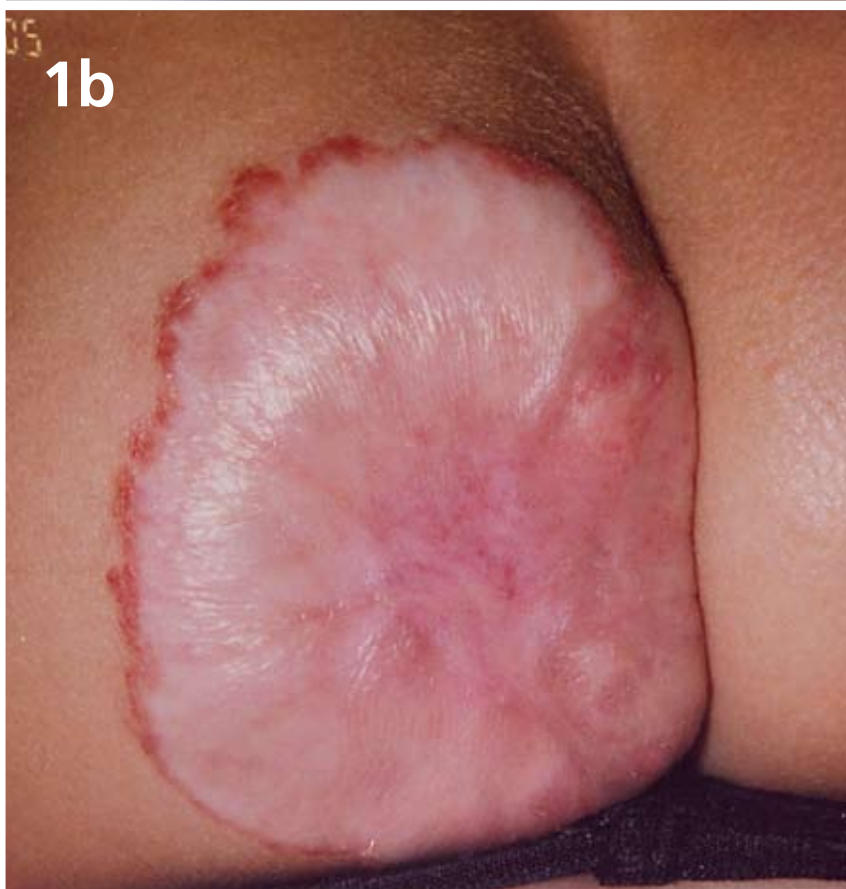
Introduction

Nursing guidelines for ulcerated haemangiomas. Four cases are discussed.



Results

All cases showed significant improvement in healing times of ulcerations and definite reduction in pain.



Case 1: Ulcerated Buttock Haemangioma

- Analgesia: Paracetamol, Codeine Phosphate 1mg/Kg or Oramorphine 0.2mg/Kg given 30-45 minutes prior to dressings.
- Swab for culture and sensitivity.
- Twice daily baths in diluted Potassium Permanganate. Dissolve several crystals in small amount of water; put enough of this solution into the bath water to make it pink.
- Prepare new dressing, prior to removing old dressing.
- On a clean surface lay two pieces of gauze, on top place one dry Sorbsan then one wet Sorbsan.
- Remove one side of Mepitel apply antibiotic ointment – until swab result available use Mupirocin 2% ointment. Remove other side of Mepitel and apply ointment side up onto rest of dressing.
- Bathe child for 3-6 minutes in Potassium Permanganate solution. Soak off old dressing.
- Allow area to dry or use a hairdryer on a cool setting.
- Apply new dressing
- At nappy changes other than bath times use Vaseline instead of antibiotic ointment on the dressing.
- Relieve pressure on area when possible by nursing on side or prone.
- Never wipe area at nappy changes, always pour **cool boiled water** over area.
- Do not use baby wipes.

History

- Born 37 weeks gestation, first of twins.
- Haemangioma not present from birth.
- Ulceration began at 3 months of age (Fig 1a) there had been occasional bleeding.
- Previous treatments, Canestan cream, Diprobase cream. Dressings of Kaltostat and Tegaderm.
- Cleaned with soap and water. Paracetamol as analgesia.
- Baby miserable, not feeding, losing weight.
- Entire lesion ulcerated.
- Referred aged 5 months to GOSH.

Treatment Plan

- Admission and pain relief: Codeine Phosphate 1mg/Kg BD, Paracetamol 75mg QDS
- Swab of ulceration for culture and sensitivity – Coliform
- Twice daily baths and dressings – Polyfax ointment for pseudomonas as previous baths had been with tap water
- Nursed prone except at feed times.
- Buttock exposed for ½ hour at bath times.

Nursing Care

- Twice-daily baths and dressing.
- 10 days after admission 25% healing of ulceration child more comfortable.
- Pulsed dye laser treatment with Candela 1B at 7.75jcm² with 7mm probe on the ulceration and 7.50jcm² on the non ulcerated area was performed 11 days post admission.
- Twice daily baths and dressings continued.
- 7 days post laser 75% of ulceration healed baby discharged home.
- Mother to continue baths and dressings.
- Daily phone calls to support mother and check progress.
- 4-week outpatient appointment there was complete healing of ulceration (Fig 1b).
- Baby happy and thriving.

Case 2: Ulcerated Lip Haemangioma

- Analgesia: Paracetamol, Codeine Phosphate 1mg/Kg or Oramorphine 0.2mg/Kg given 30-45 minutes prior to dressings.
- Swab for culture and sensitivity.
- Twice daily dilute Potassium Permanganate cleaning. Dissolve several crystals in a bowl of water put enough of this solution into another bowl or **cool boiled water** to make it pink.
- Soak gauze squares in solution and place on ulceration for 1 minute. Repeat 4 times.
- If ointment or slough is present it may be gently removed using a culture swab/cotton bud.
- Application of prescribed creams or ointment with a culture swab. Usual treatments, Daktaort ointment (Miconazole Nitrate 2% Hydrocortisone 1% in a paraffin base), orabase paste.
- Protection of Lip at feeding times, apply Vaseline to treat if bottle-fed or mother's breast if breast-fed to prevent friction.
- If feeding very problematic a short period of naso-gastric feeding may be necessary.
- Habermann teat can be very useful in some difficult cases.

History

- Born 36 weeks gestation. Haemangioma first appeared aged 1 week and increased in size rapidly.
- Ulceration began aged 3 weeks (Fig 2a), feeding became difficult, as baby would only take small amounts at a time because of pain.
- Occasional bleeding from ulceration.
- Previous treatments: Vaseline to lip, Paracetamol as analgesia.
- Multiple Cutaneous Haemangiomas.
- Referred aged 8 weeks to GOSH.

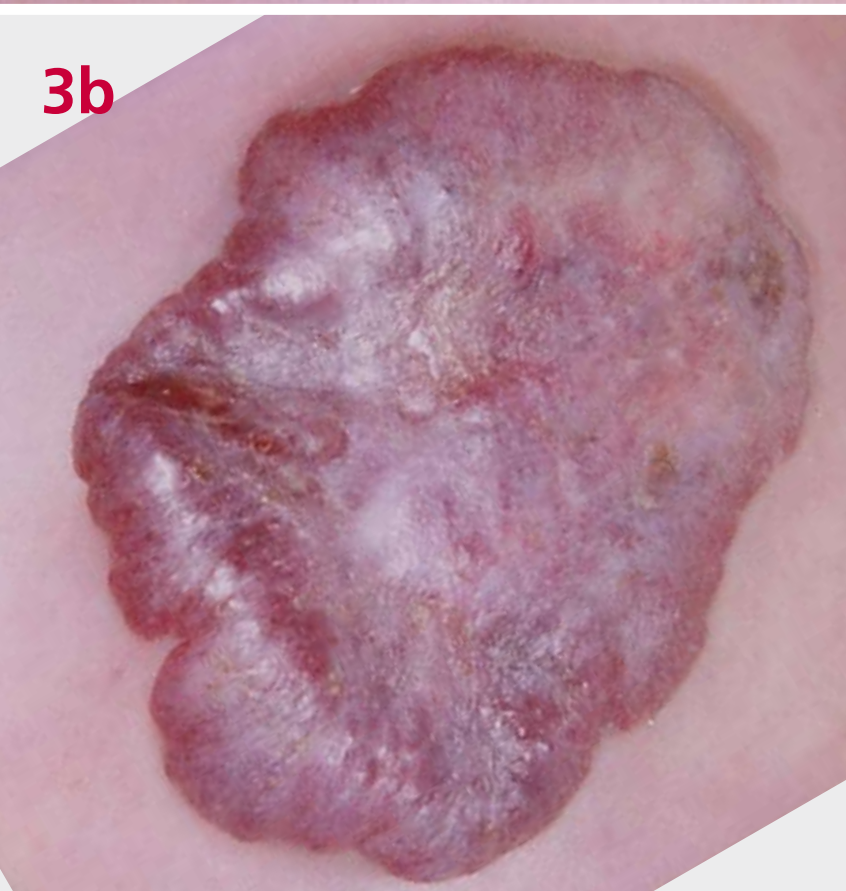
Treatment Plan

- Admission and pain relief: - Oramorphine Sulphate 0.6mg 4 hourly, Paracetamol 60mg QDS
- Swab ulceration for culture and sensitivity. Staphylococcus Aureus.
- Twice daily cleaning of ulceration.
- Application of Daktarin gel BD, prophylactically to prevent carditis.
- Application of Orabase paste prior to feeds.
- Naso gastric feed if necessary
- Abdominal Ultrasound because of multiple cutaneous lesions.



Nursing Care

- Baby very distressed particularly at feed times, initially a naso-gastric tube was used to top up feeds.
- 1 week after admission ulceration 25% healed with nursing care.
- More settled, feeding improved, Vaseline applied to lip prior to feeds. Small quantity of Vaseline applied to teat.
- Abdominal Ultrasound – one liver lesion noted.
- The Haemangioma was continuing to proliferate so baby was started on oral Prednisolone 10mg daily (2mg/Kg/day).
- Discharged home after 2 weeks Father performed the lip care and Mother the feeds.
- Daily phone calls made to family to give support.
- There was complete healing of the ulceration at 3 weeks post discharge (Fig 2b)



Case 3: Ulcerated Trunk Haemangioma

- Analgesia: Paracetamol, Codeine Phosphate 1mg/Kg or Oramorphine 0.2mg/Kg
- Swab for culture and sensitivity.
- Twice weekly baths in dilute Potassium Permanganate. Dissolve several crystals in a small amount of water put enough of this solution into bath water to make it pink.
- Prepare new dressing, prior to removing old dressing.
- On a clean surface open 4-6 gauze squares to a size that will cover lesion. Place on top appropriate sized dry Sorbsan then same size of wet Sorbsan. Remove one side of Mepitel apply ointment of choice until swab result available use Mupirocin 2% ointment. Remove other side of Mepitel and place ointment side uppermost on to Sorbsan.
- Always soak off old dressing in the bath. Bathe for 3-5 minutes.
- Allow area to dry or use a hairdryer on a cool setting, apply new dressing.
- Secure with a tubifast vest
- If bleeding occurs between twice weekly planned dressings **do not remove** but apply more padding and ask for Paediatric or Surgical help.

History

- Born at 34 weeks gestation 1.5kg in SCBU for 4 weeks.
- Haemangioma on the back not present from birth appeared at 3 weeks.
- Ulceration began at 8 weeks of age (Fig 3a). Occasional bleeding from ulceration.
- Previous treatment intravenous antibiotics: Flucloxacillin.
- Daily dressings with Aquasel, Purilon gel secured with tape, Ibuprofen as analgesia.
- Baby in severe pain, not feeding, poor weight gain.
- Referred aged 5 months to GOSH.

Treatment Plan

- Admission and pain relief: Codeine Phosphate 1mg/Kg TDS, Paracetamol 90mg QDS
- Swab of ulceration for culture and sensitivity grew: Pseudomonas. Ciprofloxacin was given IV for 4 days then orally for 6 days.
- Dressing regime using Polyfax ointment.
- Bath and dressing on day of admission – then at 2 days – then 5th day
- Nursed on side supported with pillows
- Dietary review.

Nursing Care

- Once pain relief was achieved baby much more settled and feeding well.
- Discharged home on day 6 after three dressings.
- Parents confident to change dressing on day 7 and day 10 after initially seen.
- Daily phone calls made for support.
- Seen in outpatient's day 12 (Fig 3b) there was complete healing of ulceration.
- Baby happy, smiling, feeding well and able to lay on his back.

Case 4: Ulcerated Limb Haemangioma

- Analgesia: Paracetamol, Codeine Phosphate 1mg/Kg or Oramorphine 0.2mg/Kg
- Swab for culture and sensitivity.
- Alternate day washes with dilute Potassium Permanganate. Dissolve several crystals in a small amount of water put enough of this solution into 1 litre bottle of cooled boiled water to make it pale pink.
- Prepare new dressing, prior to removing old dressing.
- On a clean surface open 4-6 gauze squares to a size that will cover lesion. Place on top appropriate sized dry Sorbsan then same size of wet. Remove one side of Mepitel; apply ointment until swab result available use Mupirocin 2% ointment. Remove other side of Mepitel and place ointment side uppermost on to Sorbsan.
- Remove old dressing by gently pouring over cleaning solution. Always soak dressing off.
- Allow to dry or use a hairdryer on a cool setting. Apply new dressing.
- Secure with cotton bandage.
- If bleeding occurs through dressing **do not remove** but apply more padding and ask for Paediatric or Surgical help.

History

- Born at 37 weeks gestation small red lesion noted at birth, which increased in size.
- Ulceration began aged 4 month (Fig 4a) with frequent bleeding.
- Previous treatments, admission to local hospital for intravenous antibiotics Flucloxacillin.
- Dressed with Kaltostat, Analgesia – Oramorphine.
- Baby in pain, not feeding well waking at night when had been sleeping through.
- Referred aged 6 months to GOSH.

Treatment Plan

- Pain Relief: Codeine Phosphate 1mg/Kg/daily at dressing changes Paracetamol 120mg QDS.
- Swab of ulceration for culture and sensitivity: Staphylococcus Aureus.
- Daily cleaning and dressing using Mupirocin 2% ointment.



Nursing Care

- Mother happy to perform dressings at home with daily phone calls to support.
- When reviewed at 1 week some healing noted but child still distressed admitted for laser treatment.
- Pulsed dye laser Candela 1B used at an energy of 7.5jcm² with a 7mm probe to the entire haemangioma.
- Daily nursing care continued.
- Discharged home on day 3 with Mother to continue daily dressings, with daily phone calls for support.
- Reviewed in outpatients 8 days later ulceration healed, child happy and not requiring any analgesia (Fig 4b).

Conclusion

The aim of nursing care of ulcerated haemangiomas is to promote healing and control pain. The results show that this can be achieved by a combination of specific treatment regimens, nursing care and intensive parent education.