Mouth Care for Haematology and Oncology Patients

Information for Shared Care Centres and Community Staff

Reference: CG1420
Written by: Hilary Quinton
Peer reviewer Dr Jeanette Payne
Approved: October 2016
Approved by D&TC: 12th August 2016
Review Due: October 2019

Intended Audience

This document contains information and clinical guidelines for management of children attending the Sheffield Childrens Hospital Oncology and Haematology department or designated shared care centres. It is to be used by staff within the shared care Trust or the community whenever they are caring for these children either in hospital or at home.

Table of contents

1. Introduction
2. Dental Care
3. Routine Oral Care
4. Mucositis
5. Infection
6. Xerostomia
1. **Introduction**

Children undergoing treatment with chemotherapy or radiotherapy to the head/neck are at increased risk of oral complications both during and following treatment. Oral pain, difficulty in swallowing, phonation and feeding difficulties will affect the patient's quality of life.

By treating dental disease early in cancer treatment, and promoting the maintenance of good dental hygiene, the risk of infection can be minimised. Direct chemotherapy or radiotherapy induced damage to the oral mucosa is an inevitable consequence of treatment, but effective infection prophylaxis during periods of neutropenia can contribute towards reducing infection.

These guidelines are based on the guidelines produced by the CCLG Mouth Care Group, which are evidence based.

2. **Dental Care**

**At diagnosis:** An oral and dental assessment should be made by a Paediatric Dental Surgeon at the Charles Clifford Dental Hospital. Any treatment required can be carried out at the Dental Hospital or, if a general anaesthetic is required, at SC(NHS)FT. Timing of treatment should be arranged to avoid periods of neutropenia, by discussion with the oncology team. The Dental Hospital will arrange clinic appointments in conjunction with clinic nurses. The child’s own registered dental practitioner will be informed of the diagnosis and arrangements for dental care during and following treatment, which can be shared. Advice on oral hygiene should be given to children/parents as soon as possible after diagnosis and reinforced throughout treatment.

**During treatment:** Dental examination should be continued every 3-4 months throughout treatment, at Charles Clifford Dental Hospital. Treatment should be carried out as previously outlined.

**Post treatment:** On completion of treatment, dental care continues at the child’s own dentist. Guidance should be provided by the Dental Hospital on ongoing problems and on any possible late dental/orofacial complications.

3. **Routine Oral Care**

All children should brush their teeth well twice a day using a soft toothbrush and fluoride toothpaste of appropriate dosage for the age. Toothbrushes should be changed every 3 months or following an oral infection. Infants should have their mouths swabbed with oral sponges moistened with water.

Children should not routinely use chlorhexidine mouthwash/dental gel, floss, fluoride tablets or electric toothbrushes, unless directed to do so by the dental team.
4. **Mucositis**

Mucositis arises due to inflammation of the oral mucosa, which causes soreness, swelling and sometimes bleeding. It occurs following radiotherapy to the head or neck, or chemotherapy. Children who have high dose methotrexate or Haematopoietic Stem Cell Transplantation (HSCT) are at particular risk.

Adequate pain control with opiates is essential, with fluid, and if necessary nutritional intravenous support for mucositis.

Routine prophylactic anti-infective agents are not recommended, but early instigation of antifungal or antiviral treatment is warranted if any lesions appear. Lesions will be swabbed before commencing therapy.

Allopurinol mouthwash should only be used in children who are receiving 5-Fluorouracil.

Calcium Leucovorin (folinic acid) is not recommended following methotrexate for prevention of mucositis as there is evidence that it may, itself, promote mucositis. It is necessary to give it orally/iv for methotrexate rescue (see individual trial protocols) immediately following high dose methotrexate treatment.

There is no evidence to support the use of chlorhexidine, benzydamine, sucralfate, tetrachlorodecaoxide or lidocaine based products. Frequent rinsing with 0.9% sodium chloride solution helps to keep the mucosa moist, reduces caking of secretions, and soothes inflamed/ulcerated mucosa. Benzydamine sprays or sodium hyaluronidate gel (Gelclair), which is still undergoing clinical trials in paediatrics, may provide brief temporary relief enabling some oral fluid intake.

Prompt referral to the oral maxillofacial surgeons will be arranged if mucositis does not respond to the treatment above, to prevent long term complications.

5. **Infection**

**Candidiasis**

Candida is the most likely, though not the only, fungal infection of the gastrointestinal tract. The prevalence of candidiasis varies within patient groups. However the duration of neutropenia induced by chemotherapy and previous infection are predisposing factors.

The use of prophylactic antifungal therapy is restricted to those patients at very high risk of fungal infection as it may lead to development of resistant fungi or fungal overgrowth of non-sensitive fungi.

If oral examination suggests candida a swab should be taken and treatment commenced with an oral systemically absorbed anti-fungal agent.

Superficial fungal infection with no fever can be treated with fluconazole, providing there are no contraindications to use of an azole. Topical preparations (miconazole oral gel 2%) can be prescribed in addition to systemic therapy for control of local irritation caused by superficial infection. If azoles are contraindicated senior medical staff at SCH should be
contacted to assess the clinical risk of delaying treatment until it is possible, or instigating immediate treatment with IV non-azole antifungal, on discussion with SCH

Herpes
Herpes simplex (HSV) infection of the lips or mouth is painful and prevents oral nutritional intake. As with candida infection, the risk is highest for children with previous infection or a long duration of neutropenia.

Prophylaxis of HSV infection may be warranted in high risk patients for repeated localised herpes simplex infection, particularly in lymphopenic patients. This is recommended in some solid tumour protocols and in previously infected HSCT patients.

If infection is suspected SCH staff take viral swabs and start aciclovir pre-emptively.

For mild non-progressing lesions on the lip; topical aciclovir cream 5% FIVE times a day for 5-10 days may be adequate.

For intra-oral lesions and progressing and severe lesions on the lip give oral aciclovir for a minimum of 5 days (see BNFc). Intravenous treatment may be necessary if oral administration is not tolerated.

6. Xerostomia

Long term xerostomia results from damage to the salivary gland caused by radiotherapy to the head. It results in loss of taste and therefore affects feeding and long term nutritional status.

Short term xerostomia may arise through drug treatment, particularly the antimuscarinic drugs, and can usually be managed by encouraging regular drinking or chewing sugar free gum.

Artificial saliva may help to alleviate symptoms and encourage oral intake in any child with xerostomia. It has Advisory Committee on Borderline Substances (ACBS) approval for prescribing by GPs for dry mouth following radiotherapy. Artificial saliva can be used as required and Salivix pastilles are also helpful.

Good regular dental hygiene is essential in these children to avoid periodontal disease and oral infection.

7. References:

CCLG/PONF Mouth Care Group. Mouth care for children and adolescents with cancer: Evidence based guidelines. 2006

BNFc BMJ Publishing Group Ltd