



# **Guideline for the Prevention and Treatment of Systemic Anti-Cancer (SACT) or Radiotherapy Induced Oral Mucositis in Adult Haematology and Oncology Patients**

**Lead Author:-**

Helen Adamson  
Oncology Pharmacist  
NHS Tayside

**Reviewed by:-**

Judith Jordan  
Regional Lead Pharmacist  
  
(on behalf of North SACT  
Delivery Group - NSDG)

**Approved by:-**

Ian Rudd  
Director of Pharmacy  
NHS Highland  
  
(on behalf of North SACT  
Governance Group - NSGG)

**Regional document  
number:-**  
NOS-STG-005

**Approval date:-**  
August 2018

**Review date:-**  
March 2021

**Uncontrolled When Printed**

**Version 2**

<b>Contents</b>	<b>Page No.</b>
1. Outline of Procedure .....	3
2. Area of Application .....	3
3. Objective .....	3
4. Stages of the Process .....	3
5. Responsibilities .....	3
6. Other useful information .....	3
7. References .....	4
Appendix 1 - Mouthcare Flow Chart .....	5
Appendix 2 - NOSCAN Mucositis Quick Reference Guide .....	6-9

## 1. Outline of Procedure

This procedure provides information on the management, implementation and training for guidance on the prevention and treatment of oral mucositis.

## 2. Area of Application

This guideline applies to all adult SACT services across the North region, except for the administrative areas of Argyll and Bute in NHS Highland which are linked to the WOSCAN CEL 30 (2012) governance framework.

## 3. Objective

To implement into practice across the North, guidance produced by the UK Oral Mucositis in Cancer Group i.e. **'UKOMiC: Mouth care guidance and support in cancer and palliative care'** and to provide a resource for clinical staff to assist prescribing in the clinical areas.

## 4. Stages of the Process

- The guideline with appendices must be approved through the appropriate Board Level management and governance structures.
- Professional SACT leads must ensure cascade of the guideline with appendices to all staff involved in SACT or Radiotherapy Administration
- All staff involved in the management of toxicities for patients receiving SACT or Radiotherapy must familiarise themselves with the guideline and appendices.
- The SACT pharmacy leads must ensure that the products set out in these documents are available to be provided to patients as required.
- The 'North Mucositis Quick Reference Guide' (Appendix 2) must be readily available in electronic and/or paper form for access in clinical areas where patients are managed on SACT and/or radiotherapy.

## 5. Responsibilities

The SACT Lead Clinician and Nursing and Pharmacy SACT leads are responsible for ensuring the implementation of the guideline. However, it is expected that all members of the multi-disciplinary team should be aware of the guideline and support implementation.

## 6. Other useful information

For a full copy of the guideline and more information about the assessment, prevention and treatment of oral mucositis go to <http://www.ukomic.co.uk/>

In NHS Tayside, Caphosol® tablets are available for restricted use.

In NHS Grampian and NHS Highland, Caphosol® is no longer included on local drug formularies due to a lack of evidence of clinical efficacy and relatively high cost.

## 7. References

UKOMiC Guidelines 2<sup>nd</sup> Edition May 2015, UKOMiC: Mouth care guidance and support in cancer and palliative care. - <http://www.ukomic.co.uk/new-om-guidelines.html>

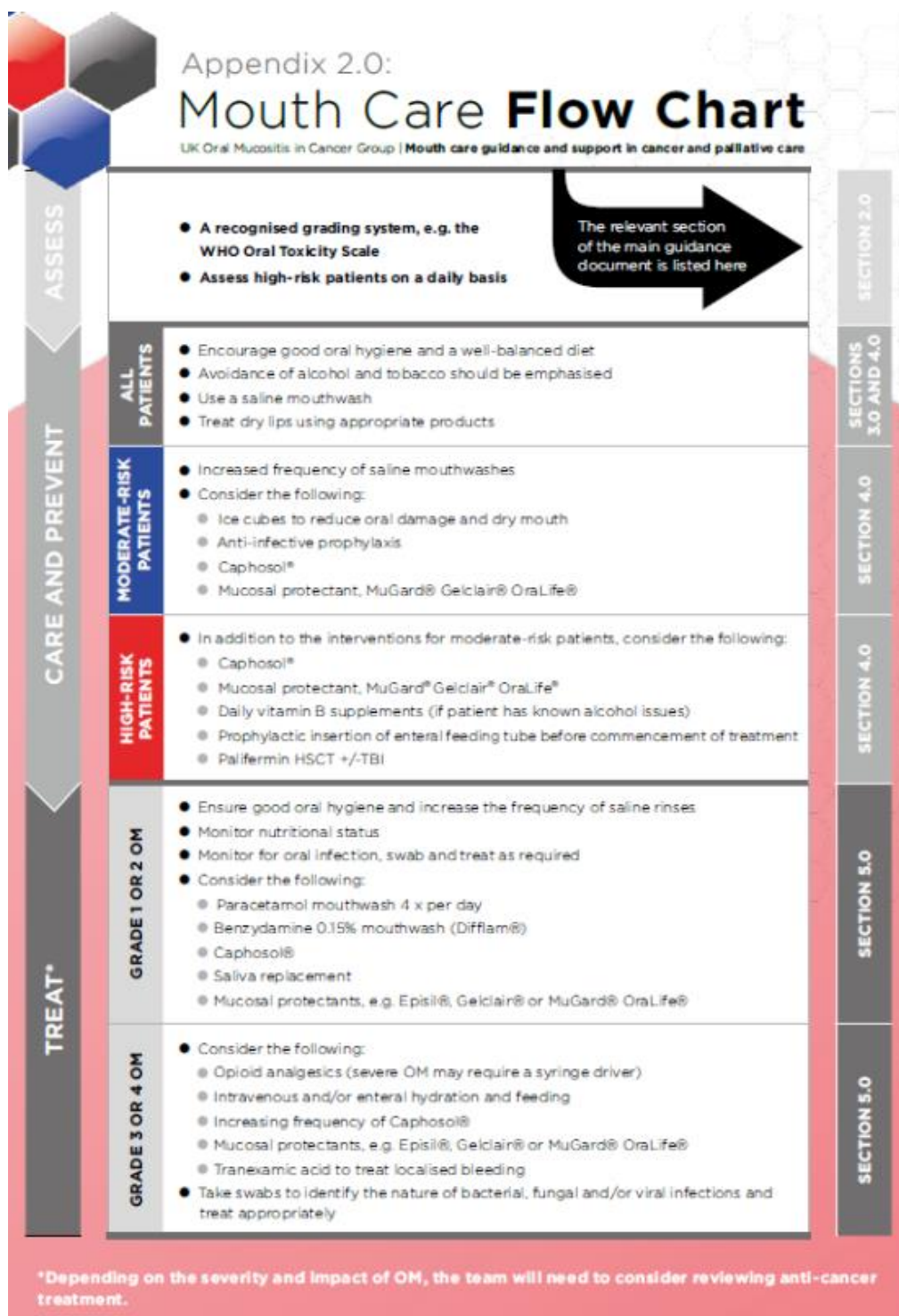
Mouthcare Flow chart - [http://www.ukomic.co.uk/pdf/Mouth\\_care\\_flow\\_chart.pdf](http://www.ukomic.co.uk/pdf/Mouth_care_flow_chart.pdf)

Mouthcare Guide - [http://www.ukomic.co.uk/pdf/Mouth\\_care\\_guide.pdf](http://www.ukomic.co.uk/pdf/Mouth_care_guide.pdf)

Oral Mucositis Products [C:\Users\hadamson\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\YE3UW0V4\UKOMIC Formulary - http://www.ukomic.co.uk/pdf/oral\\_mucositis\\_products.pdf](http://www.ukomic.co.uk/pdf/oral_mucositis_products.pdf)

## Appendix 1 Mouthcare Flow Chart

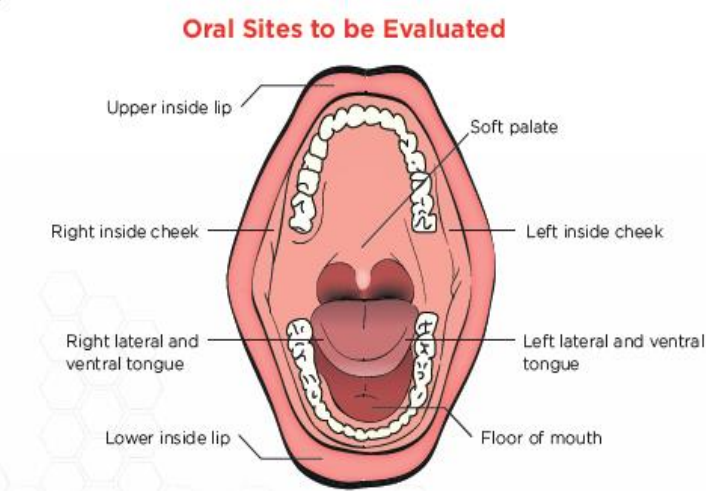
(see [http://www.ukomic.co.uk/pdf/Mouth\\_care\\_flow\\_chart.pdf](http://www.ukomic.co.uk/pdf/Mouth_care_flow_chart.pdf))



**Prevention of Mucositis**

**☑ Assess patients daily, using the WHO Oral Toxicity Scale**

GRADE	CLINICAL PRESENTATION
1	Soreness +/- erythema. No ulceration
2	Erythema, ulcers. Patients can swallow solid diet.
3	Ulcers extensive erythema. Patients cannot swallow solid diet.
4	Oral mucositis to the extent that alimentation is not possible.



**☑ Encourage good oral hygiene**

- Teeth should be brushed twice daily and after meals as tolerated using a soft toothbrush and fluoride-containing toothpaste palatable to the patient. Foaming/strong flavoured toothpastes are less well tolerated.
- If an oral infection develops, use a fresh toothbrush.
- Patients who find brushing difficult may find oral sponges easier than toothbrushes.
- Dentures should be cleaned after each meal, soaked in denture solution overnight and disinfected weekly.

**☑ Pre-existing dental problems should be addressed – consider referral to a dental practitioner**

**☑ Encourage fluid intake (2 Litres daily unless otherwise directed) and a well balanced diet**

- Spicy foods may irritate the mouth and be aware rough/crunchy foods may damage mucosal lining/gums.
- Avoid alcohol and tobacco

**☑ Consider using ice cubes to reduce oral damage and relieve dry mouth but**

**☒ Do not use ice in patients undergoing radiotherapy**

- ☑ **Treat dry lips using appropriate lip salve e.g. white or yellow soft paraffin, patient's own lip salve**
- ☒ **Do not use oil-based lip salve for patients on oxygen or undergoing radiotherapy**
  - Use a water soluble lubricant e.g. AQUAGEL
- ☒ **Chlorhexidine mouthwash is not recommended. Avoid prescribing alcohol containing medicines**
- ☑ **Encourage regular saline mouthwash for patients with previous Grade 2 or taking causative drugs**
  - Inpatients: prescribe sodium chloride 0.9%
  - Outpatients: Add 1 teaspoon of salt to 1 pint of water, make a fresh supply daily
  - Drugs which cause OM: fluorouracil, docetaxel, cyclophosphamide, methotrexate, anthracyclines (doxorubicin, epirubicin, daunorubicin, idarubicin), capecitabine, sunitinib, EGFR inhibitors (erlotinib, lapatinib)
  - Drugs which cause dryness/change the normal mucosal environment: anticholinergics, opiates, diuretics, sedatives, oxygen
  - Drugs which predispose to oral infection e.g. oral or high dose inhaled steroids
- ☑ **Prescribe mucosal protection<sup>®</sup> and consider anti-infective prophylaxis** for patients with resistant grade 2 OM despite treatment, undergoing radiation to head and neck or high risk chemotherapy regimens e.g. BEAM, high-dose melphalan/methotrexate/cytarabine. Refer to individual Chemocare<sup>®</sup> protocols for anti-infective advice.
- ☑ **Consider other risk factors: age (children/elderly), co-morbidities, type/extent of malignancy etc.**

## Treatment of Mucositis

### **GRADE 1: Soreness +/- erythema, no ulceration**

- ☒ Ensure good oral hygiene and monitor nutritional status (MUST)
- ☒ Observe for signs of oral infection, swab and treat if required
- ☒ Increase the frequency of saline mouthwashes
- ☒ Dry mouth: consider saliva replacement with Biotene® / BioXtra® gel or Glandosane® spray
- ☒ Generalised oral pain: prescribe soluble paracetamol if not already on the drug chart
- ☒ Pain on eating/swallowing prescribe: Benzydamine (Difflam®)

### **GRADE 2: Erythema, ulcers, patients can swallow solid diet**

- ☒ Consider Caphosol® dispersible tablet four times a day \*\*
- ☒ Consider Gelclair® for mucosal protection
- ☒ When erythema and ulcers resolved stop Gelclair®

### **GRADE 3/4: Ulcers, extensive erythema, patients cannot swallow solid diet/alimentation not possible**

- ☒ Consider opioid analgesics
  - Severe oral mucositis may require subcutaneous administration.
  - Liquid oral morphine containing alcohol should be avoided. Consider liquid oral oxycodone
- ☒ Consider intravenous and/or enteral hydration and feeding
- ☒ Consider tranexamic acid to treat localised bleeding

\*\* Not available in NHS Grampian and NHS Highland. Restricted use in NHS Tayside.



**Drug treatment**

Drug	Route	Dose	Frequency/Times	Notes
Saline mouthwash	M/W	10 - 20ml	0800 1200 1800 2200 *	Prescribe as Sodium chloride 0.9%
Benzydamine 0.15% mouthwash (Diffiam®)	M/W	10ml	0800 1200 1800 2200 *	Dilute with 10mL water if required to prevent stinging
Gelclair®	Apply	1 sachet	0800 1200 1800	As a rinse before food (to form a protective layer)
Tranexamic Acid Mouthwash 500mg/5ml	M/W	5 - 15ml	0800 1400 2200	Confirm dose and frequency with medical staff
Paracetamol (Soluble or Suspension)	Oral	1g	0800 1200 1800 2200	For patients < 50kg, reduce dose to 500mg four times a day.
Biotene®/BioXtra®	Oral	One application	When required for dry mouth	
Glandosane®	Oral	1 spray	When required for dry mouth	

\* In severe mucositis, frequency of use of sodium Chloride or benzydamine mouthwash can be increased up to ten times a day.

<b>Replaces:</b>	Version 1
<b>Lead Author(s):</b>	Helen Adamson Specialist Oncology Pharmacist NHS Tayside
<b>Responsibilities of the Lead Author(s):</b>	<ul style="list-style-type: none"> <li>• Retain master copy of this document (will also be available on regional website)</li> <li>• Review document in advance of review date</li> </ul>
<b>Key word(s):</b>	Mouthwash, mucositis, oral, radiotherapy, SACT
<b>Area(s) of application:</b>	To all adult SACT services across the North region, excluding the administrative areas of Argyll and Bute in NHS Highland which are linked to WOSCAN.
<b>Purpose/description:</b>	Guideline for preventing and managing SACT and radiotherapy induced mucositis in adult patients
<b>Policy statement:</b>	It is the responsibility of all staff to ensure that they are working to the most up to date and relevant clinical process documents.
<b>Responsibilities for implementation within Local NHS Boards:</b>	<b>Organisational:</b> Operational Management Team and Chief Executive <b>Sector:</b> General Managers, Medical Leads and Nursing Leads <b>Departmental:</b> Clinical Leads <b>Area:</b> Line Manager
<b>Responsibilities for review of this document:</b>	Lead Author/ North SACT Delivery Group (NSDG)
<b>Review frequency and date of next review:</b>	In the absence of any obvious changes, this document should be reviewed every 3 years

**Revision History:**

<b>Revision Date</b>	<b>Previous Revision Date</b>	<b>Summary of Changes (Descriptive summary of the changes made)</b>	<b>Changes Marked (Identify page numbers and section heading)</b>
July 2018	N/A	Updated Appendices	Section 7 References
		Caphosol® largely removed from guideline - in NHS Grampian and NHS Highland, is no longer included on local drug formularies due to a lack of evidence of clinical efficacy and relatively high cost. In NHS Tayside, tablets are available for restricted use.	

\* Changes marked should detail the section(s) of the document that have been amended i.e. page number and section heading. If there is no previous document insert N/A into the boxes in the top row of the table below)