PALLIATIVE CARE & ORAL CARE STUDY GROUPS

Summary Review

MASCC/ISOO Expert Opinion:

Management of Oral Problems in Patients with Advanced Cancer

Citation:

Abstract:
Purpose: The Palliative Care Study Group in conjunction with the Oral Care Study Group of the Multinational Association for Supportive Care in Cancer (MASCC) formed a sub-group to develop evidence-based guidance on the management of common oral problems in patients with advanced cancer.

Methods: This guidance was developed in accordance with the MASCC Guidelines Policy. A search strategy for Medline was developed, and the Cochrane Database of Systematic Reviews and the Cochrane Central Register of Controlled Trials were explored for relevant reviews / trials, respectively. Guidance was categorised by the level of evidence, and “category of guideline” (i.e. “recommendation”, “suggestion”, or “no guideline possible”).

Results: Twelve generic suggestions (level of evidence – V), three problem-specific recommendations, and 14 problem-specific suggestions were generated. The generic suggestions relate to oral hygiene measures, assessment of problems, principles of management, re-assessment of problems, and the role of dental / oral medicine professionals.

Conclusions: This guidance provides a framework for the management of common oral problems in patients with advanced cancer, although every patient requires individualised management.

Recommendations: Generic

All patients with advanced cancer should be regularly assessed for oral problems.

Level of evidence – V; Category of guideline – suggestion
All patients need a regular oral hygiene regimen, and dependent patients need appropriate support with oral hygiene.

Level of evidence – V; Category of guideline – suggestion

The management of oral problems should primarily involve treatment of the underlying cause (with appropriate symptom control).

Level of evidence – V; Category of guideline – suggestion

The management of oral problems should be individualised.

Level of evidence – V; Category of guideline – suggestion

The management of oral problems should be evidence-based, and / or based upon established principles from dentistry / oral medicine.

Level of evidence – V; Category of guideline – suggestion

Relevant treatments / interventions should be available in all settings wherever possible.

Level of evidence – V; Category of guideline – suggestion

All patients with oral problems should be regularly reassessed.

Level of evidence – V; Category of guideline – suggestion

Patients with resistant oral problems should be referred to a specialist for further management.

Level of evidence – V; Category of guideline – suggestion

Dental professionals should be members of the extended oncology and palliative care multidisciplinary teams.

Level of evidence – V; Category of guideline – suggestion

Oral care in the terminal phase should focus on patient comfort.

Level of evidence – V; Category of guideline – suggestion

Oral care in the terminal phase is not a substitute for clinically assisted hydration.

Level of evidence – V; Category of guideline – suggestion

Oral care should be an integral component of medical and nursing curricula (undergraduate, postgraduate).

Level of evidence – V; Category of guideline – suggestion

**Recommendations: Dry mouth**

Management should include treatment of the underlying cause (if possible), e.g., discontinuation of offending medication.

Level of evidence – V; Category of guideline – suggestion
Artificial salivas
Level of evidence – II, i.e. mucin-based artificial saliva; Category of guideline – recommendation

Chewing gum
Level of evidence – II; Category of guideline – recommendation

Acupuncture
No guideline possible

Pilocarpine
Level of evidence – II; Category of guideline – recommendation

Recommendations: Taste disturbance
Management should include treatment of the underlying cause (if possible), e.g., treatment of salivary gland hypofunction.
Level of evidence – IV; Category of guideline – suggestion

Patients with taste disturbance should be reviewed by a dietitian, and a personalised nutritional plan developed.
Level of evidence – V; Category of guideline – suggestion

Strategies that may be useful include: utilization of foods that taste “good”; avoidance of foods that taste “bad”; enhancing the taste of the food using salt, sugar, and other flavourings; moistening the food; and addressing the presentation, smell, consistency, and temperature of the food, i.e. paying attention to other aspects of flavour.
Level of evidence – V; Category of guideline – suggestion

Zinc supplements
No guideline possible

Dronabinol
Level of evidence – II, i.e. pilot study; Category of guideline – suggestion

Megestrol acetate
No guideline possible

Clonazepam
No guideline possible

Recommendations: Oral discomfort / pain
Management should include treatment of the underlying cause (if possible), e.g., re-lining, adjusting, or replacing poorly fitting dentures.
Level of evidence – V; Category of guideline – suggestion
The optimal analgesic regimen depends on the aetiology of the pain (cancer-related, coexisting condition), the pathophysiology of the pain (nociceptive, neuropathic), and a variety of patient-related factors (e.g., co-morbidities, personal preference).

**Level of evidence – V; Category of guideline - suggestion**

**Recommendations: Halitosis**

Management depends on the type of halitosis: in patients with physiological halitosis it primarily involves oral hygiene measures, whilst in patients with pathological halitosis it primarily involves treatment of the underlying cause (if possible), e.g., antibiotics for infections.

**Level of evidence – V; Category of guideline – suggestion**

The management of physiological halitosis includes: a) generic oral hygiene measures; b) avoidance of odorous foodstuffs (e.g., garlic, onions); c) alcohol cessation; d) smoking cessation; e) measures to reduce bacterial numbers (e.g., tongue cleaning, chlorhexidine - mouthwash); f) measures to reduce bacterial substrate (e.g., tongue cleaning, “professional” dental / periodontal cleaning); and g) measures to convert offensive volatile sulphur compounds to inoffensive non-volatile compounds (e.g., zinc salts - toothpaste, mouthwash; sodium bicarbonate / baking soda – toothpaste).

**Level of evidence – V; Category of guideline – suggestion**

Many oral care products are available to manage halitosis, and those with specific properties should be prescribed in preference to those with simply “masking” / cosmetic properties.

**Level of evidence – V; Category of guideline - suggestion**

**Recommendations: Oral candidosis**

Antifungal medication (especially azoles) should preferably be reserved for patients with laboratory confirmed oral candidosis.

**Level of evidence – V; Category of guideline – suggestion**

Antifungal medication should be combined with treatment of predisposing factors.

**Level of evidence – V; Category of guideline – suggestion**

The choice of treatment depends on a number of factors: a) extent of disease – topical agents are appropriate for treating localized disease, whilst systemic agents are more appropriate for treating multifocal / generalized disease; b) immunocompetence – systemic agents are more appropriate for treating immunosuppressed patients; c) drug resistance – resistance to the polyenes is uncommon, although resistance to the azoles is relatively common; d) concomitant disease – azoles have a number of relative / absolute contraindications; e) concomitant medication – systemic azoles have a number of drug interactions; f) patient preference; g) ease of use – topical agents are more difficult to use, and efficacy is dependent on correct usage (i.e. contact with lesions); and g) patient adherence.

**Level of evidence – V; Category of guideline – suggestion**

Single doses of fluconazole

**No guideline possible**
Chlorhexidine
No guideline possible

Tea tree oil
No guideline possible

Successful management of denture-related stomatitis (with / without angular cheilitis) depends on a combination of antifungal drug treatment, and disinfection of the denture.
Level of evidence – V; Category of guideline – suggestion

Levels of Evidence and Categories of Guidelines:

Level I: Evidence obtained from meta-analysis of multiple, well-designed, controlled studies; randomized trials with low false-positive and false-negative errors (high power).
Level II: Evidence obtained from at least one well-designed experimental study; randomized trials with high false-positive and/or false-negative errors (low power).
Level III: Evidence obtained from well-designed, quasi-experimental studies, such as nonrandomized, controlled single-group, pretest-posttest comparison, cohort, time, or matched case-control series.
Level IV: Evidence obtained from well-designed, non-experimental studies, such as comparative and correlational descriptive and case studies.
Level V: Evidence obtained from case reports and clinical examples.

Recommendation: Reserved for guidelines that are based on Level I or Level II evidence.
Suggestion: Used for guidelines that are based on Level III, Level IV, and Level V evidence; this implies panel consensus on the interpretation of this evidence.
No guideline possible: Used when there is insufficient evidence on which to base a guideline; this implies (1) that there is little or no evidence regarding the practice in question, or (2) that the panel lacks consensus on the interpretation of existing evidence.