Citation

# Levels of Evidence

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Recommendation</td>
<td>Reserved for guidelines that are based on Level I or Level II evidence.</td>
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<tr>
<td>Suggestion</td>
<td>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.</td>
</tr>
<tr>
<td>No guideline possible</td>
<td>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.</td>
</tr>
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</table>

Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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
Recommnendations

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
Recommendations

The management of oral problems should be individualised.

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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
Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

All patients with oral problems should be regularly reassessed.

• Level of evidence – V
• Category of guideline – suggestion
Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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

• Level of evidence – V

• Category of guideline – suggestion
Recommendations

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
Recommendations: Dry mouth

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
Recommendations: Taste disturbance

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
Recommendations: Taste disturbance

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

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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
Recommendations: Halitosis

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
Recommendations: Halitosis

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
Recommendations: Oral candidosis

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
Recommendations: Oral candidosis

Single doses of fluconazole
• No guideline possible

Chlorhexidine
• No guideline possible

Tea tree oil
• No guideline possible
Recommendations: Oral candidosis

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