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Guidelines for the oral care of patients who are dependent, dysphagic or critically ill

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Introduction

Mouthcare is of great importance for patients who are dependent on nursing staff to maintain oral hygiene (Clarke, 1993). Standards of mouthcare in professional care settings have been demonstrated to be inadequate (Adams, 1996; Aldred *et al*, 1991; Fiske *et al*, 1990; Longhurst, 1999; Merelie and Heyman, 1992; Tobias and Smith, 1990). In long term care facilities, numerous problems mitigate against the provision of oral health care and encourage neglect (Fiske *et al*, 2000). Patients largely rely on staff's perception of oral hygiene requirements and the need for access to dental services and there is considerable concern over levels of oral pathology that are associated with inadequate and unscientific mouthcare practices (Fiske *et al*, 2000; Griffiths, 1998).

Patients in intensive care units may be more vulnerable to oral disease and discomfort than the general population and may be unable to care for themselves. It is a common myth that patients who are fed parentally do not require the same tools for maintaining oral hygiene and comfort. A systematic review of oral care confirmed that many of the tools and materials used for mouthcare are inappropriate (Bowsher *et al*, 1999). However it is essential that oral health and comfort is maintained and promoted for patients with percutaneous endoscopic gastrostomy (PEG) and nasogastric feeding. Such patients have special problems as oral tissues are more prone to disease and discomfort than in those who receive nutrition orally (Griffiths, 1995).

The effects of nasal oxygen, mouth-breathing, intermittent suction of the airway, constant open mouth posture, as in intubated patients, and restriction of oral food and fluid will contribute to xerostomia. Oral health may be further compromised by the fact that many ITU patients are therapeutically dehydrated to maximise respiratory, renal and cardiac function (De Walt, 1975; Kite, 1995). Many drugs and drug classes have been linked to xerostomia and the xerogenic effect increases when drugs are taken concurrently (Sreebny and Shwartz, 1997). Xerostomia (dry mouth) is an uncomfortable and potentially harmful oral symptom that increases the risk of oral disease and discomfort (Walls and Murray, 1993).

Oral health may be further compromised by systemic disease. Detailed practical guidance for nurses to address the specific oral problems of oncology patients receiving radiotherapy, chemotherapy and bone marrow transplantation based on clinical guidelines from the Royal College of Surgeons (Shaw *et al*, 1999) have been published (Fiske and Lewis, 2001). High calorie food supplements may be necessary to maintain nutritional status. There is an increased risk of caries when sugar based medication, laxatives or high calorie food supplements are administered orally to dentate patients. It is essential that a high standard of mouthcare combined with adequate and appropriate lubrication, and preventive dental measures is provided for all dependent patients in order to alleviate symptoms, maintain oral comfort and prevent a deterioration in oral health.

Assessment

An accurate oral assessment is central to effective care. Oral assessment on admission by trained staff using agreed criteria is recommended (Day, 1993). Nurses are ideally placed to ensure thorough and regular assessment and early identification of problems amenable to nursing, medical or dental intervention (Krishnasany, 1995). This should take place as soon as possible to provide information about the type of oral care required (Jenkins, 1989) (*Appendix 1*). Gloves should always be worn for oral assessment and all oral hygiene procedures.

Oral care plan

Mouth care is an essential part of overall patient care. Oral care procedures must be based on sound scientific evidence and not on tradition, anecdote or subjective evaluation (Gibson *et al* 1997). An oral care plan appropriate to individual needs should be developed for each patient. Factors

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such as general health, medical condition and prognosis, medication and therapeutics as well as previous standard of oral hygiene and oral care skills should be taken into account. Whenever possible there should be cooperation and participation of patients, carers and/or relatives in drawing up a care plan.

Oral hygiene needs

Assessment and care planning will help identify individual needs to maintain a good standard of oral hygiene. Nurses and care staff should have the knowledge and be trained in the skills required to preserve and maintain oral health (Griffiths and Boyle, 1993; Krishnasany, 1995). Written advice kept at the bedside is essential for reference (*Appendix 2*). Frequency of oral care and lubrication may need to be increased when the patient has profound xerostomia. A toothbrush is not usually the nurse's first choice of oral hygiene tool (Harris, 1980; Howarth, 1997). However a small soft toothbrush is the most effective tool (Addy *et al*, 1992; Bowsher *et al*, 1999). Foam sticks should only be used when other techniques are not appropriate. When brushing is not possible, mucosa and tongue may be cleaned by swabbing with a gloved finger wrapped in gauze (Turner, 1994). The patient's ability to swallow will affect the management of oral care. An aspirating toothbrush can be used in severely dysphagic patients (Griffiths, 1995; Griffiths and Boyle, 1993).

All necessary oral and denture hygiene aids should be easily available. Relatives or carers can be involved in supplying these if considered appropriate. Hospital shops should stock recommended and approved toothbrushes, toothpaste, denture cleaners and mouthwashes (Day, 1993).

Dental services

Access to specialist services is essential for advice, support with individual care and treatment when necessary. All staff should be aware of available dental services and how to contact them.

Evaluation

The effectiveness of oral care should be evaluated after an interval appropriate to the patient's individual needs. The oral care plan can then be revised, if necessary, on the basis of evaluation and changes in risk factors.

Training

Staff should be trained in basic oral assessment, the provision of oral care and criteria for the need to refer to a dental service. Agreed standards for mouthcare should be included in induction programmes for staff. Liaison between the dental and nursing professions is recommended to address the deficiencies in pre and post-qualification nurse training in oral healthcare (Longhurst, 1998). Regular appraisal and further training should be provided when required.

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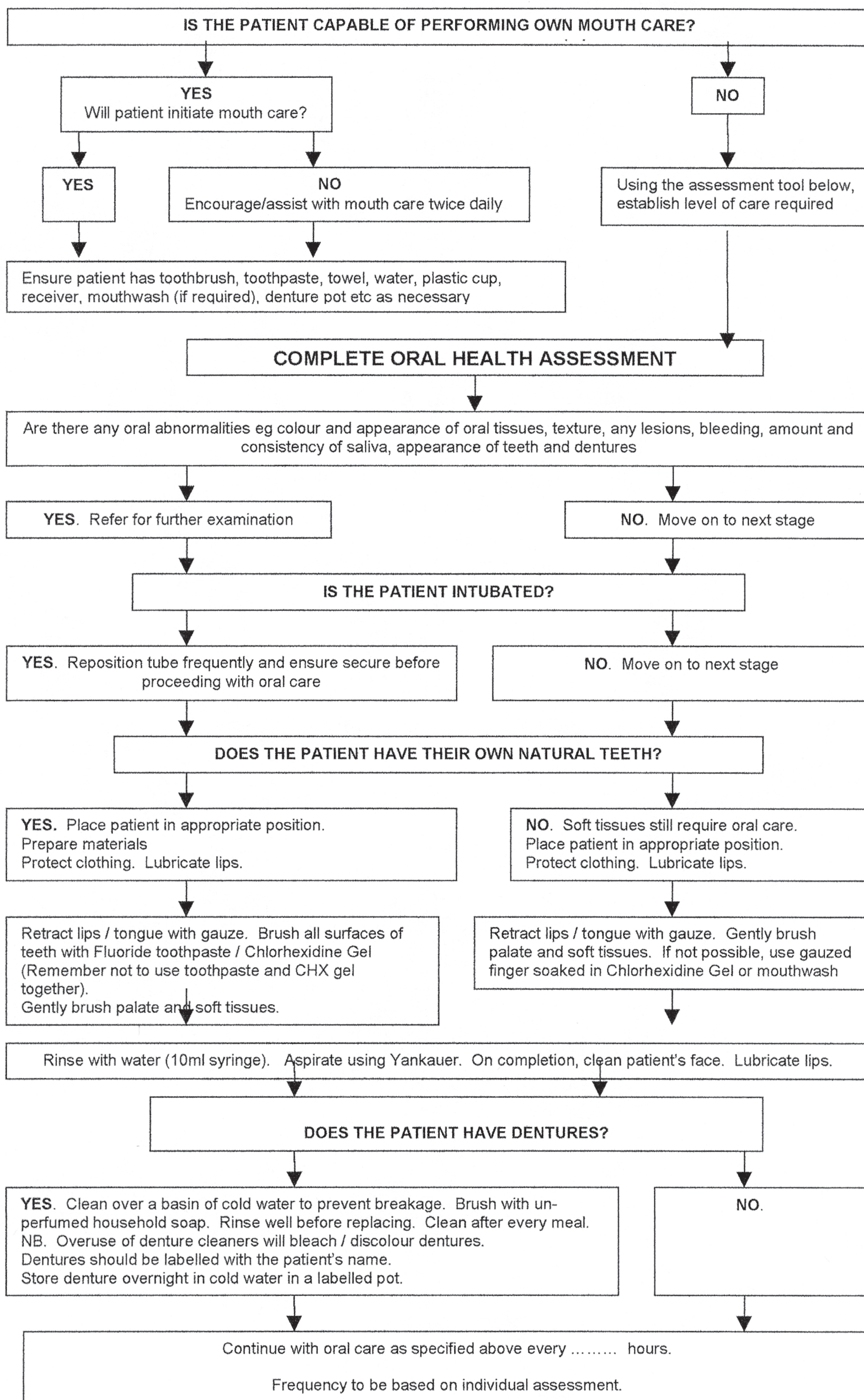
Appendix 1. Oral Assessment Guide



Appendix 2. Summary of oral care for the dependent patient

Prepare appropriate oral hygiene materials
Place the patient in a sitting or semi-fowler's position to protect the airway
Protect clothing
Remove dentures or other removable appliances

- **Dentate patient**
  If necessary insert a mouth prop to gain access
  Floss interproximal surfaces of teeth, taking care not to traumatise gingivae
  Brush all surfaces using fluoride toothpaste or chlorhexidine gel. (Remember that traditional foaming agents in toothpaste inactivate chlorhexidene so use one or the other or alternate their use, at different times of the day).
  Rinse or aspirate to remove saliva and toothpaste
- **Dentate and edentulous patients**
  Gently retract cheeks and brush inside surfaces with soft, gentle strokes
  Using gauze to hold the tongue, gently pull the tongue forward and brush surface gently from rear to front
  Gently brush palate
  Towel or swab mouth if toothbrushing is not possible
  Aspirate throughout procedures if airway is at risk
- **Dentures and removable appliances**
  Brush vigorously with unperfumed household soap
  Pay particular attention to clasps
  Rinse well in cold water
  Saliva substitute may be required before replacing denture in the mouth
- **Intubated patients**
  Reposition tube frequently to prevent lip soreness
  Ensure tube is secure before proceeding with oral care
  Proceed with oral care as appropriate.

Reproduced from Griffiths and Boyle, 1993