Guideline - Dental Damage

Friday, 1 February 2008

Dental injuries are the commonest anaesthesia related incident in Australia[1].

There are three aspects to consider in the risk management of dental damage.

1. Risk avoidance = preoperative assessment.
2. Damage control = prompt treatment of the injury
3. Risk transference = insurance

Risk avoidance requires a proper dental assessment prior to anaesthesia to identify and document high risk patients. This should be part of the routine pre operative assessment and referral to a dentist for care may be a consequence of such an assessment. A comprehensive documentation of which teeth are present, which are damaged and prosthesis should be recorded using the FDI dental system. In children loose deciduous teeth should also be identified.

Right	18 17 16 15 14 13 12 11	21 22 23 24 25 26 27 28	Left
	48 47 46 45 44 43 42 41	31 32 33 34 35 36 37 38	

The quadrants are numbered clockwise from the upper right and teeth in each quadrant are numbered from the midline.

A warning of the possibility of dental damage should be given to the patient. Following intubation and airway management the patient's teeth should be examined for any damage.

Damage control dental damage can be classified based on the extent of the damage from an enamel infraction through to complete dislodgement. Once damage has occurred the following needs to happen.

1. Locate and retain the tooth or fragment to minimise the risk of aspiration. Radiology may be required.
2. Institute management of dental trauma
    a. For avulsion or subluxation
        i. Where possible reimplant the tooth immediately with digital pressure.
        ii. Get a dental opinion as soon as feasible to arrange splinting and follow up.
        iii. Young teeth will often heal but older teeth may suffer from pulp canal obliteration and root resorption.
    b. Chipped or fractured tooth
        i. Examine the remaining tooth.
        ii. If only enamel is involved no immediate treatment is required.
        iii. If pulp or dentine is exposed urgent treatment is required.
        iv. With enamel fracture only 2% will develop pulp necrosis this increase to 5% if there is associated mobility.
    c. Broken or dislodged bridge crown or implant
        i. Again fragments should be retained
        ii. If pulp or dentine is exposed then more urgent treatment is required.
3. Explain to the patient how the damage occurred without self blame.
4. Make an accurate record of the damage and the events surrounding the incident in the patient's medical record and submit an IMS form the nursing staff can help with this.
5. Seek permission for and arrange any immediate dental therapy required
    a. This can be done for urgent treatment through the facio-maxillary registrar contact via switch board.
6. The next step is to arrange an individual assessment of the damage by the Hunter Area Dental Service. This can usually be done the next day. We have an "understanding" that they will

[1] H Owen, I Waddell- Smith Anaesth Intensive Care 2000; 28: 133-145

assess any dental damage. The best approach is to give the details to the Director to approach HADS alternatively the Duty Director can also call. Our contact in HADS is Dr Lanny Chor clinical director HADS ext 64835 during the day. The point of this is to get an independent assessment of any damage not to organise treatment.

7. Notify your medical indemnity organisation.
8. Following assessment treatment *may* be organised through HADS. Patients qualify for this if they are health card holders. There is also a free dental service for patients of aboriginal or Torres Strait origin through the Awabakal dental service in Hamilton their phone number is 4969 2505.
9. Trainees must inform their supervising consultant.

Who Pays for Damage to Teeth?

"The anaesthetist is not responsible for the cost of managing complications of properly conducted anaesthesia. This is also true of the anaesthetist's medical defence organization. However, even where there is no negligence, the costs of defending a claim for repairing damage to teeth are such that it will usually be settled by insurers. Claims against anaesthetists for dental damage are common but may account for only 1% of liability. Usually, for a claim against an anaesthetist to succeed in court, negligence must be demonstrated. This requires that the plaintiff's lawyers show that the anaesthetist failed to meet the accepted standard of care. A preoperative dental examination may be considered the standard of care. Absence of a record of dental examination may make a claim difficult to defend. The doctrine of res ipse loquiter "the thing speaks for itself" has been used but courts have also concluded that broken teeth are an accepted risk of laryngoscopy and not evidence of negligence per se[2]*."*

Given the above it is not recommended that the anaesthetist introduce the subject of expense, offer to pay for treatment or arrange non urgent dental treatment. On occasion following assessment by a HADS dentist we have arranged in consultation with the director of anaesthesia dental treatment as a gesture of good will and to reduce the cost and inconvenience to the patient.

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[2] H Owen, I Waddell- Smith Anaesth Intensive Care 2000; 28: 133-145