

with a reported incidence of 0.0033–0.0049%. We sought to identify potential risk factors and suggest preventive measures.

**Materials/methods:** We analysed 130 cases reported in the literature including 4 treated in the local unit. The factors analysed were the demographic details of the patients, side of fracture, extent/angulation/degree of impaction, associated pathologies, presentation of fracture, time to fracture and management of fracture.

**Results/statistics:** Fractures were more common in males (M:F–2.4:1), with a peak incidence in the 36–60 year age group. Fractures were more common on the right (R:L–1.8:1) and following removal of mesioangular, fully impacted, class II/III, Type B/C (Pell & Gregory) impactions. Post operative fractures were more common than intra-operative fractures (2.7:1) and occurred most frequently in the 2nd and 3rd post-operative weeks. The gender (M:F–1:1.3 vs 3.9:1) and peak incidence (36–45 vs 36–60 years) differed between post-operative and intra-operative fractures. A “cracking noise (77%) was the most frequent presentation and most fractures were managed “conservatively”.

**Conclusions/clinical relevance:** Mandibular fractures should be in large part predictable, even if not preventable. The risk of fractures can be minimised by thorough assessment, identifying high risk patients and formulating a comprehensive treatment plan, which includes the most appropriate surgical approach. Informed consent and patient education should form part of the management plan.

<http://dx.doi.org/10.1016/j.bjoms.2012.04.178>

33

### Retrospective and prospective study of factors influencing success and failure of skin grafts to the head and neck following excision of skin cancers. A single surgeon experience

L. McCarthy\*, P.J. Ameerally

*Northampton General Hospital, United Kingdom*

**Introduction:** There are multiple factors that influence the success and failure of skin grafts.

**Aim:** To analyse factors influencing the success and failure of skin grafts and improve future management of patients having this procedure.

**Materials and method:** One hundred and fifty six patient records from the database of one consultant were analysed retrospectively. Data collected included age, sex, location procedure was performed, general anaesthesia or local anaesthesia, site, size and type of tumour, past medical history, medications, full or partial thickness flap, graft donor site, dressing type and duration, suture material type and size at the graft and donor site, antibiotics usage and post-operative complications. Similar data is being collected prospectively.

**Results:** There was a 3:2 male to female ratio. The mean age was 78 years. 86% of the grafts were full thickness and

14% partial thickness. 86% of the procedures were performed under local anaesthetic. 62% of the tumours were basal cell carcinomas, 30% squamous cell carcinomas, 5% melanoma and 3% other tumours. 45% had no complications, i.e. both the donor and recipient site were healthy. Of the 55% with a complication, 12.5% of these complications were associated with the donor site, whilst the others were related to the recipient site. Bleeding (45%) of the graft recipient site was the most common complication reported, followed closely by infection (29%) of the recipient site. And partial necrosis (17%) of the recipient graft site. Graft loss (7%) and haematoma formation (2%) were rare complications.

<http://dx.doi.org/10.1016/j.bjoms.2012.04.179>

34

### Influence of NICE guidance on the management of mandibular third molars in British service personnel

T. Pepper\*, T. Konarzewski, P. Grimshaw, J. Combes

*Defence Medical Services, United Kingdom*

**Introduction:** NICE guidance on the extraction of mandibular third molars (M3Ms) was introduced in 2000. While there have been studies assessing compliance, little research has been completed into how the guidance has changed practice. This study sought to examine the reasons for wisdom tooth removal before and after implementation of NICE guidance.

**Methods:** 521 clinical dental records of patients from three Service dental centres were surveyed.

**Results:** The overall prevalence of M3Ms was 88.1% (918/1042). 166/918 M3Ms (18.1%) did not erupt during the period studied (median 15.8 years). The median age at eruption for the remainder was 19.7 years (interquartile range 18.8–22.2 years). 204/918 (22.2%) M3Ms were extracted. The median patient age at which M3M removal occurred was 2.9 years greater after publication of NICE guidance (Mann–Whitney  $U = 3046.5$ ;  $P < 0.001$ ). Similarly the median time from first sign of eruption to extraction increased from 1.6 years to 3.5 years pre- and post-NICE guidance.

Instances in which no reason was stated for M3M extraction fell by 29.2% (95% CI 17.6–38.8%) after publication of NICE guidance, while extractions due to caries in M3Ms rose by 16.6% (95% CI 7.0–27.7%) and extractions due to >1 episode of pericoronitis rose by 19.4% (95% CI 8.1–31.5%) after publication of NICE guidance.

**Conclusions:** In the military NICE guidance has resulted a greater proportion of M3Ms being removed due to caries and multi-episode pericoronitis. Removal now occurs longer after eruption and later in the patient's life.

<http://dx.doi.org/10.1016/j.bjoms.2012.04.180>