DENTAL EMERGENCIES AND THEIR MANAGEMENT AT THE CASUALITY DEPARMENT OF MUHIMBILI MEDICAL CENTRE

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ABSTRACT

The purpose of this retrospective study was to determine the type of after office hours dental emergencies and their management at the casuality department of Muhimbili Medical Centre. Of the 94 patients who attended, the majority were adult males. Of these 38.3% had cut wounds, 20.2% had facial bone fractures, another 20.2% had bleeding sockets, 5.3% had infections, another 5.3% had tooth injuries, 4.3% had TMJ disclocations, 3.2% had tumors and 3.2% were diagnosed with other problems. Generally patients were managed and either admitted for further management or recalled to attend the out patient clinic. Management included suturing (35.1%), and TNJ reduction (3.2%).

INTRODUCTION

Although oral malignancies and maxillofacial trauma are far less prevalent, they give a heavy burden upon the oral health services (1). World-wide, fewer than 10% of published research reports discuss trauma to the dentofacial structures (12). Most traumatic injuries to the teeth and their supporting structures constitute a true dental emergency as they require urgent evaluation and treatment(3). Haemorrhage should be considered the first of all surgical emergencies and soft tissue lacerations of cheeks, lips, floor of mouth can be controlled by suturing(4). The management of fractures is directed towards the reestablishment of normal maxillomandibular and craniomaxillary relationships (5). The aim of this study was to analyse the type of dental emergencies by age and sex and

their management. The study will enlighten on the pattern of dental emergencies enabling the setting up of appropriate facilities for optimum care at the Muhimbili Medical Centre.

MATERIALS AND METHODS

94 patients attending the casuality servces of Muhimbili Medical CEntre after office hours during a period of six months were recorded subsequently in a register by the intern on call specifying age, sex, diagnosis and management of the dental emergencies atteded to. Age of the patient was grouped as child (0-15 years) and adults above 15 years. Diagnosis was categorized as bleeding sockets, infection, cut wounds, TMJ dislocation, facial bone fractures, tooth injuries, tumors and others. Management provided was either suturing, request for x-ray , medication, adrenaline packs or TMJ reduction. After management the patients were either admitted or recalled to attend the out patient clinic. Data processing was done by means of a computer and statistical analysis performed according to the Chi-square test.

RESULTS

Adults had a higher attendance compared to children and there were more males than females. Cut wounds had the highest prevalence among both adults and males, followed by bleeding sockets and facial bone fractures. Tooth injuries were more in children while adults had a predominance in TMJ dislocations. Management included mainly suturing (35.1%) followed by requests for x-rays (21.3%), adrenaline packs (20.2%), medication (20.2%) and TMJ reduction (3.2%) respectively. Most of the patients (80.8%), were discharged and recalled to the outpatient clinc while some were admitted for further management (see histogram).

DISCUSSION

The higher incidence of soft tissue injuries followed by facial bone fractures is in agreement to an investigation done by Galea (6) who observed that 47% of the accidents and falls had soft tissue

injuries while victims of road traffic accidents sustained bone fractures. In children, dental trauma is associated with blunt impact injuries to the oral soft tissues and less commonly fractures of mandible or maxilla occur (7,8,9). Sheller et al (10) in their study also found that 60% of the visits were for trauma and the remainder for infection or other reasons. In Singapore (45.3%) of the trauma patients had soft tissue injuries while 13.7% had associated facial bone fractures (11). Fractures were mainly managed by requesting for x-rays and being recalled to the out patient clinic. Weinberg (5) in his study documented that treatment of fractures should be undertaken after the patients general medical condition is stabilized in about three to five days. Bleeding socket occurrence was related to inadequate explanation of post operative instructions or improper implementation of the instructions given (12).

Infection accounted for a significantly small percent (5.3%) as a majority of infections may have been managed at district hospitals or in the dental out patient clinic. Van palenstein et al (13) showed that most infections were managed by provision of emergency care.

TMJ dislocations occur spontaneously following stretching of the mouth as in yawning and it occurs with reltive frequency (14) in both younger age groups or elderly patients (15). Being a referral hospial most tumor cases are sent here for further management but only a few are seen by the doctor on call as most are admitted directly to the appropriate ward by the casuality officer.

Tooth injuries were common among children compared to adults as in accordnace with Ripa et al (16). Also due to the plasticity of the alveolar bone in children as compared to adults most accidental traumas cause tooth injuries (17). Ability of safety restraints to reduce the number of injuries, especially to the face is well

documented (18).

This study shows that there is a need of a well equiped dental emergency clinic operating after office hours.

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