CASE REPORT

BURNS FROM ORTHODONTIC PLIERS

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SUMMARY. A case of burn injury from orthodontic pliers resulting in a partial-thickness burn is presented. A brief description of the injury, a review of the pertinent literature, and general guidelines for out-patient management of such burns are also presented.

Introduction

Iatrogenic injury is an intrinsic risk in all medical procedures. Various kinds of iatrogenic complications have been extensively reported and recognized. On occasion, among case reports of the various medicolegal defence organizations, mention is made of burns to the lips and oral soft tissues arising from contact with a heated instrument. We believe that iatrogenic burns from contact with heated surgical instruments are far more common in practice than the paucity of reported cases might suggest.

Case report

An otherwise healthy 23-yr-old woman was treated by an orthodontic in a multidisciplinary dental centre. Some months later she had a left inferior second premolar root canal therapy, in the same clinical tooth. The dentist, encountering some technical difficulties with the orthodontic structure, used pliers (probably Weingart Utility Pliers), which he sterilized in a glass bead sterilizer and then immediately used. The heated jaws of the pliers contacted the anaesthetized lower lip and vestibulum (obtained by mandibular block) causing a second-degree burn that resembled the pliers' jaw pattern (*Figs. 1,2*). The patient was treated by applying triamincinolone ointment and healed uneventfully within two weeks.

Fig. 1 - Comma-like burn resembling an orthodontic pliers jaw-like pattern.

Fig. 2 - A closer view.

Discussion and conclusion

Rosenberg and Baruchin[1] reported an ear, nose, and throat specialist who heated his laryngeal mirror over an alcohol lamp and as usual tested the mirror temperature against the dorsum of his hand - an act that resulted in a first-degree burn. Ho and Ying[2] described two patients referred to hospital for iatrogenic flame burn caused by the breakage of an alcohol lamp during ENT examination. In 2000 we described a similar case of a contact burn to the lower lip inflicted with a heated tooth-extracting forceps.[3] Skin injuries are sometimes mistaken for burns, and medical devices are immediately blamed as the cause; however, such a hasty conclusion may overlook the actual cause of the injury and delay the implementation of measures to prevent future occurrences.[4,5]

In conclusion, although this type of injury fortunately represents only a small percentage of total burn injuries, it causes a particular type of lesion in which aesthetic sequelae and legal litigation are highly hazardous.

Certain precautions should be taken to assure that no morbidity is associated with the use of heated surgical instruments. Such precautions are especially important when the patient is fully or locally anaesthetised.

RÉSUMÉ. Les Auteurs présentent le cas d'une brûlure d'épaisseur variable causée par l'emploi de pinces orthodontiques. Ils présentent en outre une brève description de la lésion, un examen de la littérature relative et des lignes directrices pour la gestion ambulatoire de ce type de brûlure.

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G. WHITAKER INTERNATIONAL BURNS PRIZE – PALERMO (Italy)
Under the patronage of the Authorities of the Sicilian Region for 2007

By law n. 57 of June 14th 1983 the Sicilian Regional Assembly authorized the President of the Region to grant the "Giuseppe Whitaker Foundation", a non-profit-making organisation under the patronage of the Accademia dei Lincei with seat in Palermo, a contribution for the establishment of the annual G. Whitaker International Burns Prize aimed at recognising the activity of the most qualified experts from all countries in the field of burns pathology and treatment.

Law n. 23 of December 2002 establishes that the prize becomes biannual.

The next prize will be awarded in 2007 by the month of October in Palermo at the seat of the G. Whitaker Foundation.

The amount of the prize is fixed at Euro 20,660.00.

The Adjudicating Committee is composed of the President of the Foundation, the President of the Sicilian Region, the Representative of the National Lincei Academy within the G. Whitaker Foundation, the Dean of the Faculty of Medicine and Surgery of Palermo University or his nominee, a Representative of the Italian Society of Plastic Surgery, three experts in the field of prevention, pathology, therapy and functional recovery of burns, the winner of the prize awarded in the previous year and a legal expert nominated in agreement with the President of the Region as a guarantee of the respect for the scientific purpose which the legislators intended to achieve when establishing the prize.

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