Pakistan Oral & Dent. Jr. 24 (2) Dec 2004

GENERAL PRACTITIONERS CORNER

ACUTELY INFLAMED SOCKET: A POST EXTRACTION SOCKET HEALING COMPLICATION - CLINICAL OBSERVATIONS IN 2 PATIENTS

WASIU LANRE ADEYEMO- BDS, FMCDS
MOB OLANLE OLUGBEMIGA OGUNLEWE- BDS, FWACS
AKINOLA LADIPO LADEINDE- BDS, FWACS, FMCDS

ABSTRACT

Acutely inflamed socket as a complication of extraction socket wound healing is a very rare clinical entity worldwide. We report 2 patients with acutely inflamed socket following non-surgical extraction of permanent teeth. One of the patients had a positive history of hypertrophic I keloid scar.

INTRODUCTION

Acutely inflamed socket as an extraction socket wound healing complication was recently described by Cheung et al.[1] as a painful socket with exuberant inflamed tissue but without pus or systemic fever. In sharp contrast to all previous reports in the literature which overwhelmingly reported "dry socket" as the most common complication of extraction socket wound, Cheung et al.[1] reported acutely inflamed socket as the commonest clinical condition complicating the healing of extraction wound in their study. In our own environment, occurrence of this clinical condition is very rare.

We identified interesting cases of acutely inflamed socket in 2 patients during our routine post-extraction socket healing assessment at the Exodontia Clinic of the Department of Oral and Maxillofacial Surgery of the Lagos University Teaching Hospital, Lagos, Nigeria, with different clinical features.

CASE REPORTS

Case 1

A 15 — year old Nigerian girl had extractions of her upper and lower left first premolars for orthodontic reasons. She presented 3 days later with alveolar osteitis of both extraction sockets, which were managed by socket irrigation with warm normal saline and the patient was also placed on tablets Ibuprofen 400mg b.d for 2 days. Twenty days following the extractions, she presented again with erythematous, exuberant inflamed tissue of both sockets, no pus discharge (figures la and b). A clinical diagnosis of inflamed sockets was made and the sockets were managed by curettage and irrigation with warm normal saline. Healing was subsequently uneventful (figure 2).

Case 2

A 26 — year old Nigerian woman who had a history of keloid excision, had extractions of her upper left first premolar and lower left second premolar for orthodontic reasons. She presented 24 days after the extraction with erythematous, exuberant inflamed tissue of both sockets, no pus discharge affecting the sockets of the extracted teeth. A clinical diagnosis of inflamed socket was made and the sockets were managed by curettage and irrigation

Fig la: Case 1. Inflamed socket of upper left first premolar.

Department of Oral and Maxillofacial Surgery, School of Dental Sciences, College of Medicine, University of Lagos, Nigeria.

Corresepondence to: Oral and Maxillofacial Surgery Department, Lagos University Teaching Hospital, IdiAraba, Lagos, Nigeria. Telephone:- +234-8023115885. E-mail: lanreadeyemo@yahoo.com

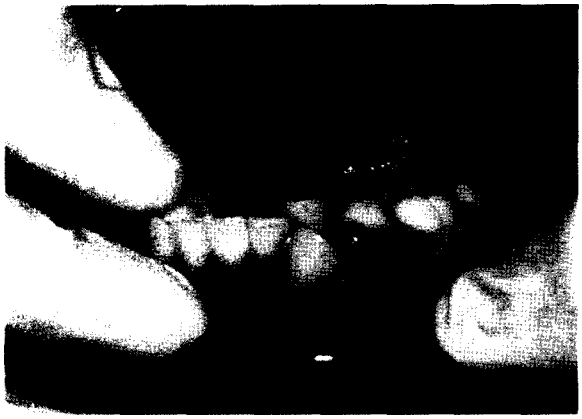

Fig lb: Case 1. Inflamed socket of lower left first premolar.

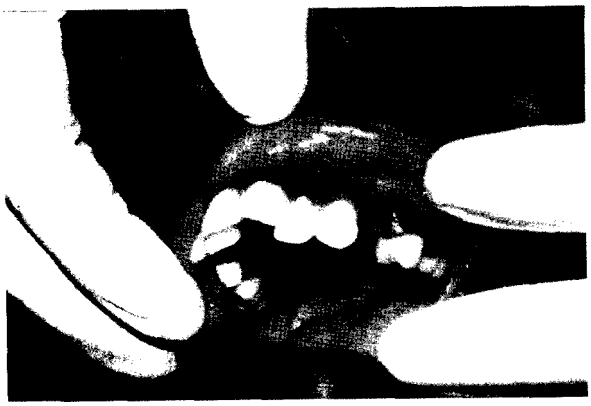

Fig 2: Case 1. Extraction socket of upper left first premolar 7 days after treatment for inflamed socket.

with warm normal saline. Healing was subsequently uneventful.

DISCUSSION

Disturbance of extraction wound healing following the extraction of permanent teeth is not uncommon. Dry socket is considered worldwide as the most common complication of extraction wound healing[2,3,4]. Other conditions that have been reported to complicate the healing of extraction socket are suppurative osteitis (socket infection), necrotising osteitis, and fibrous healing[3,5]. Amler[5] established a relationship between different disturbances of socket healing and healing stages. Dry socket according to him, results from disturbances in the healing progression from blood clot to granulation tissue, while suppurative osteitis is the result of failure or interference in the mechanism of connective tissue developments. Clinical and histological findings in the present reports of acutely inflamed socket suggested a disturbance at the third stage of healing of extraction socket[5] with exuberant inflamed tissue overfilling the socket.

Cheung et al.[1] reported acutely inflamed socket as the commonest complication of extraction wound, presenting within 7 days following extraction of permanent teeth, with either mild or no pain. A lesion of similar clinical appearance called "epulis granuloma-tosa" emanating from the extraction socket was earlier described by Leong and Seng[6]. Acutely inflamed socket seen in our patients presented between 20 and 24 days following teeth extraction with mild pain or no pain at all. One of our patients had what we thought was an uneventful healing of the sockets after 7th day routine assessment, only to present later with inflamed sockets. The other patient developed dry sockets within 3 days following extraction and was successfully managed, only to present later with acutely inflamed socket.

Interestingly, inflamed socket developed from the two extraction sockets in each of the patients, and one of our patients had a positive history of keloid formation. Keloid represents a genetic pathologic overhealing state. The lesion is caused by excessive production and deposition of collagen and glycoprotein without equivalent degradation[7]. The relationship between acutely inflamed socket and keloid formation may require further investigation.

Alveolar osteitis still remains the most common disturbance of extraction socket healing seen in our clinic. Acutely inflamed socket is rarely seen. Although, the number of cases of acutely inflamed socket presented in this report is too few to draw any conclusion, it is our opinion that a lot of clinical studies and observations are needed to enrich our knowledge on the clinical condition called "Acutely inflamed socket". The aetiology and clinical course need to be further elucidated. Any relationship with keloid /hypertrophic scarring also needs further investigation. We hope this clinical observation will stimulate interest on the true incidence, aetiology and clinical course of acutely inflamed socket, among clinicians worldwide.

REFERENCES

1. Cheung LK, Chow LK, Tsang MH, Tung LK. An evaluation of complications following dental extractions using either sterile or clean gloves. Int J Oral Maxillofac Surg 2001; 30: 550 — 554.
2. Seward GR, Harris M, McGowan DA. Killey and Kay's outline of oral surgery. Bristol: IOP Publishing Ltd., 1987: 174-207.
3. Simon E, Matee M. Post-extraction complications seen at a referral dental clinic in Dar Es Salaam, Tanzania. Int Dent J 2001; 51 (4): 273 — 6.
4. Amaratunga NA, Senaratne CM. A clinical study of dry socket in Sri Lanka. Int J Oral Maxillofac Surg 1988; 26 (5): 410 — 18.
5. Amler MH, Disturbed healing of extraction wounds J Oral Implant 1999; 25 (3): 179-84.
6. Leong R. Seng GF. Epulis Granulomatosa: extraction sequellae. Gen Dent 1998; 46 (3): 252-5.
7. Papel ID. Facial plastic and reconstructive surgery, 2nd edn. New York: Thieme Medical Publishers, 2002:21.