

**HUMAN BITE INJURY TO EARLOBE BY A PATIENT WITH ALTERED
SENSORIUM –A RARE OCCUPATIONAL HAZARD**

Ganesh Singh Dharmshaktu¹, Irfan Khan²

1. Assistant Professor, Department of Orthopaedics, Government Medical College,
Haldwani, Uttarakhand.

2. Senior Resident, Department of Orthopaedics, Government Medical College,
Haldwani, Uttarakhand.

Submitted on: November 2014

Accepted on: November 2014

For Correspondence

Email ID:

drganeshortho@gmail.com

Abstract -

Human bite injuries are uncommon but serious injuries. They can cause considerable morbidity if secondarily infected or not properly managed. Although the condition frequently involves the hand, facial and head neck region are other common sites owing to their exposed structure. Common mode of injury is human conflict but inadvertent injury can also happen. The presented case highlights a rare form of such injury inflicted on a health worker by a patient with altered mentation with occasional violent behavior.

Keywords– Human Bite Injury, Ear injury, Infection, Adult Varicella Infection, Treatment.

Introduction –

There are various sort of occupational injuries to healthcare personnel and most of these are accidental in nature. The working environment full of deadly pathogens complicates the possibility of those injuries being serious and fatal at times. The proper preventive set up including prohibitive gears to safer infrastructure are key to safeguard bodily harm. An adult varicella infection has been linked to more serious course and mortality outcomes as compared to its childhood form.[1] Many a times, associated neurological complications may cause violent outbursts and altered level of consciousness. A close encounter with a patient with no knowledge of an unprovoked behavior causing harm to health attendant is

a potential mode of injury and should be kept in mind while dealing with such cases.

Case Report –

A 42 year old male ward attendant in emergency department presented to us with history of injury to his ear. The injury was caused during transporting and handling of a patient off the stretcher to the ward bed. The alleged patient had history of altered level of consciousness for last two days with occasional burst of violent behavior. On examination of the ear injury, there was part of ear lobe, pinna was bitten off and chewed by the altered patient (Fig. 1). There was no active bleeding and wound looked clean with no history of harm to adjacent or remote body parts. The wound was restricted to fleshy portion of pinna and did not involve cartilaginous part and helix

(Fig.2). The wound was cleaned thoroughly and debridement was done before the dressing. Parenteral antibiotics were administered in tandem with empirical broad spectrum coverage. There was no necessity of further imaging investigations and only basic blood investigations were sent. The pain was managed initially with intravenous followed by oral pain medication on as and when required basis.

The patient that caused injury was behaving violently with periods of normalcy in between. He had history of fever with rash since couple of days back. On examination, the skin rashes were typical of chicken pox infection all over his body most notably on abdomen, limbs and back (Fig.3). On leading questions with relatives, there was history of contact with a case, his child with chickenpox present. A provisional diagnosis of neurological involvement like encephalopathy in a case of adult varicella infection was made and patient admitted in intensive care for further management. The proper informed consent regarding future publication was procured from both the persons. The patient left against medical advice two days later for a private hospital.

Result –

The patient was satisfactorily managed with uncomplicated wound healing of the wound with no immediate or remote complication related to the wound. There was no pain and wound problem when finally followed at one year. The assailant patient was lost to follow up but was told as healed and living normal life when asked with his relative who worked in the hospital as well.

Discussion –

The human bite injuries to ear are uncommon injuries. Being third commonest bite injuries, they are mostly caused during fight between closed relatives, friends or sexual assailant. [2] The risk of infection, however is less than other areas of injury like clenched fist owing to rich vascular

supply of head and neck region.[3] The wound should be cleaned and debridement well to avoid infection or in cases of established one.[4] The follow up is equally crucial to the management of post human bite injuries especially with regard to the patient characteristics and subsequent poorer outcome.[5]

The appropriate antibiotic coverage is key to effective and uneventful outcome of human bite injuries. *Streptococcus* species and *Prevotella* species are most common aerobic and most prevalent anaerobe reported in recent studies, although it is mixed infection that is commonly encountered in clinical practice.[6] The decision about out-patient or hospitalized treatment can be considered on the basis of wound characteristics as 1-2 % of the bite injuries are worth admission for various concerns.[7]

Conclusion –

Proper care while dealing with violent and altered patients and anticipation of the injury can help mitigate the burden of such unprovoked injuries. A good cleaning and debridement holds key to uneventful outcome.

Acknowledgement – None.

Conflict of Interest – None.

References –

1. Abro AH, Ustadi AM, Das K et al . Chickenpox: Presentation and complications in adults.JPMA 59:828; 2009.
2. Donkor P, Bankos DO. A study of primary closure of human bites injuries to the face. J Oral Maxillofacial Surg ; 1997;55:479-81.
3. Goldwin Y,Allison K,Waters R. Reconstruction of large defect of the ear using a composite graft following a human bite injury.British J of Plastic Surg; 1999; 52: 152-54.
4. Spira M, Hardy SB. Management of Injured Ear. Am J Surg; 1963; 106:678-84.

5. Patzakis MJ, Wilkins J, Bassett RL. Surgical findings in clenched-fist injuries. Clin Orthop Relat Res 1987; 220:237-40.
6. Merriam CV, Fernandez HT, Citron DM, Tyrrell KL, Warren YA, Goldstein EJ. Bacteriology of human bite wound infections, Anaerobes 2003; 9:83-86.
7. Brooke I. Human and animal bite infections. J Fam Pract 1989; 28:713-18.

Figures / Legends –

Fig 1.- Bite injury to earlobe.



Fig 2.- Closer look of injury.



Fig 3.- The assailant patient with varicella lesion.

