Retrieval of bullet as foreign object: A Case Report

Dr. Jogender Kumar Jangra¹, Dr. Ravinder Solanki², Dr. Shalini Dhiman³

¹MDS (Oral & Maxillofacial Surgery), Consultant Oral Surgeon at Shri Ganesh Dental Clinic and Maxillofacial Centre Rohtak Haryana
²MDS (Oral & Maxillofacial Surgery), Associate Professor, PGIDS, Rohtak Haryana
³BDS (Dental Surgeon) at Shri Ganesh Dental Clinic and Maxillofacial Centre Rohtak Haryana

ABSTRACT

Aims and Objective: Foreign bodies are often encountered by oral and maxillofacial surgeon and these may present a diagnostic challenge to them due to many factors such as the size of the objects, the difficult access and a close anatomic relationship of the foreign bodies to the vital structures. This paper shows a foreign object was removed from vestibule which was found to be a part of bullet which remain embedded there for more than two years.

Case Description: Here is a case report in which radiographic evidence of foreign object in the left side buccal vestibule of lower jaw buccal to the second and third molar was found, with a history of bullet injury two year back. The patient did not have any major complaint relating to the bullet lodged or any symptom of lead poisoning.

Discussion: Foreign bodies embedded in the tissue do not necessarily result in the clinical presentation as like this case.

Summary and Conclusion: Facial gunshot injuries should be managed as other type of facial trauma. Much attention need to be drawn towards the presence of retained lead bullet in the body, as it can lead to plumbism.

Key Words: Lead poisoning, Bullets, Facial Gunshot injury, Foreign body.

INTRODUCTION

Gunshot injuries are not very common in the Indian population due to the fact that it is difficult to obtained firearms legally. But still people acquire home made pistols illegally in India especially in Northeast India. These are used in group fights among youngsters.

This case report presents a patient who suffered from such a injury during fight on his face and pellet of bullet remain embedded in his lower third of face without any significant symptoms for the last two years.

The face comprises of a complex anatomical arrangement of bone and soft tissues so that the severity and extent of injury may range from a simple wound of soft tissue to a severe destruction of facial structures including vascular and nervous tissues.

CASE REPORT

A 22years old boy (Fig 1) applied to the clinic with complains of a hard swelling in the buccal vestibule of lower jaw near wisdom tooth. Detailed anamnesis was taken and history revealed that patient was shot by unidentified man two years back over maxillofacial region. He was taken to local hospital where soft tissue repair was done.
On intraoral examination, a bony hard, nontender, nonfluctuant fixed swelling of 1.0 x 1.0cm size was found below buccal mucosa in relation to second and third molar of lower jaw left side. There was no sinus discharge; no neurological deficit or functional deficit was detected on both. Extra oral examination revealed a scar mark of approximately 1.0 x 0.5 cm size in upper lip lateral to the ala of nose on left side of face. The radiographic examination (OPG View) reveals a well-defined radiographic object with respect to mandibular second and third molar of left side, without marked sign of pathological changes (Fig 2).

After two years, he noticed hard swelling for which he came to the clinic, where after routine investigations; object was removed surgically under local anaesthesia (Fig 3) and Primary closure of soft tissue was done (Fig 4). The object was found to be a bullet of approximately 1.0 x 1.0cm size (Fig 5). Healing was satisfactory.
DISSCUSION

Fire arms injuries to the maxillofacial region are uncommon in general population, but if occur they can result in simple injury to devastating functional and aesthetic consequences. The majority of patients die due to such injuries but some can survive with serious injuries on the face. In this patient, bullet was lodged in the maxillofacial region but did not destroy any vital structure.

The severity of injury depends on the type of firearm, the velocity of the bullet and the distance from which the person is shot. The basic type of firearm injuries are classified into three groups as penetrating, perforating and avulsive. Bullet injuries are divided into high velocity and low velocity. A high velocity bullet cause to quick and fatal injuries to the victim whereas a low velocity bullet results in a non-fatal injury. A low velocity firearm includes hand guns like home-made pistol and revolver. This case is a victim of penetrating type of low velocity bullet from handgun. It is therefore, more likely that oral and maxillofacial surgeon will encounters low velocity bullet injuries patients.

As foreign body can cause fistula formation, recurrent infection or secondary haemorrhage, so its extraction is indicated even in the absence of clinical symptoms. Sometimes retained bullet can lead to plumbism which results in the anorexia, vomiting, constipation, abdominal pain and occasionally anaemia and renal toxicity. There are many examples of bullets penetrating deep into the tissues that remain asymptomatic for life time of the patient. In this case also bullet remains asymptomatic for more than two years.

CONCLUSION

Facial gunshot injuries should be managed as other type of facial trauma. Much attention should be given towards the presence of retained lead bullet in the body, as in some cases it can lead to plumbism, fistula formation or recurrent infection while in some cases no clinical symptoms found like this case. Thus decision should be taken by maxillofacial surgeon whether to remove foreign object like bullet or leave it there, in view of any infection, discomfort or uncontrolled toxicity.

BIBLIOGRAPHY