

Keep or Remove

Lawrence A, Zarullail NH

Department of Orthopaedic & Traumatology, Hospital Sibul, Sarawak, Malaysia

INTRODUCTION

Gunshot wound are high energy injuries that highly contaminated and contribute to extensive soft tissue injury and fractures. We reported a case of a gunshot injury with retained pellets over the foot.

REPORT:

A 28 year old gentleman presented with shotgun injury over the left foot. Examination revealed multiple small entry wounds over his medial and dorsum aspect of his left foot. The foot was swollen but the compartment was still soft. Plain radiograph showed multiple pellets over the foot with no fractures. Initial wound irrigation done and patient was started on prophylaxis intravenous antibiotic. We proceeded with debridement and removal of the pellets. The entry wound debrided, unfortunately minimal number of pellets can be removed. Most of the pellets were deep to the muscle layer and close to the bone. Complete removal of pellets will lead to extensive soft tissue damage and poor functional outcome.

Post operatively, the wound was clean, the compartment remained soft with no functional limitation of the ankle and foot movement. There were no symptoms of plumbism and he was discharged well. The wound will need skin grafting later.

DISCUSSION:

Injury due to shotgun is considered as contaminated as the ability to devitalize the tissues thus thorough debridement is mandatory in these types of injuries. In general, total removal of pellets is necessary during the debridement to reduce risk of sepsis and plumbism however this will result in severe functional disability of the affected limb.

Literatures suggest that removal of retained missiles depending on location.

In general, missiles retained in soft tissues and muscles will be surrounded by fibrous tissue and environmentally separated from the host

thus not necessitate removal. There are specific indications to remove such as missiles retained in joints or bursae, that cause nerve impingement or in a vessel or lumen or spinal canal.



Figure 1: soft tissue picture

Figure 2: xray of left foot

CONCLUSION:

Removal of well embedded foreign body has to be revisited and individualized according to type of injury and location and symptoms.

REFERENCES:

Dhingra and mahajan (2015) dormant shotgun bullets, are they really dormant : journal of clinical case report

M. Isa Kara, DDS, Hidayet B. Polat, DDS, PhD, and Sinan Ay, DDS, PhD Penetrating shotgun pellets : European journal of dentistry

Flippin, J.A., Kishawi, S., Braunstein, H. et al. A rare case of retained sabot after close-range shotgun injury. *surg case rep* 7, 148 (2021).