Original Research Paper

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ENT

FOREIGN BODY REMOVAL FROM FACE AND LEFT EAR FOLLOWING BLAST INJURY IN A PEDIATRIC PATIENT: A CASE REPORT

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ABSTRACT Blast injuries involving the head and neck region in children are uncommon but potentially life-threatening due to the proximity of vital neurovascular and sensory structures. Retained foreign bodies may result in chronic infection, pain, cosmetic deformity, and functional impairment if not identified and managed appropriately. We report the case of a 12-year-old male who sustained blast injuries to the face and left ear with retained foreign bodies.The boy was carrying used container of firework with him. Careful clinical evaluation and surgical exploration led to successful removal of multiple foreign body fragments with preservation of facial and auricular structures. Early intervention and meticulous wound management resulted in favorable recovery without significant complications.

KEYWORDS : Blast Injury, Foreign Body, Face, Ear, Pediatric Trauma, Head And Neck Injury

INTRODUCTION

Blast injuries represent a complex form of trauma caused by explosive forces and associated penetrating fragments. Injuries to the head and neck region are particularly significant because of the dense concentration of vital anatomical structures including cranial nerves, major blood vessels, sensory organs, and airway passages. Retained foreign bodies after blast trauma may remain occult and later present with infection, granuloma formation, chronic discharge, hearing disturbance, or cosmetic deformity.

Pediatric blast injuries require special attention because children possess thinner soft tissues and smaller anatomical dimensions, increasing the risk of deeper penetration and structural damage. Prompt diagnosis and removal of retained foreign bodies are essential to prevent long-term morbidity.

This report describes the management of a pediatric patient with retained foreign bodies in the facial region and left ear following a blast injury.

Case Presentation

A 12-year adolescent , presented to the emergency department with multiple injuries over the face and left ear following a blast-related accident. The patient complained of pain, bleeding, swelling, and discomfort over the affected regions immediately after the incident.

On examination, multiple puncture wounds and abrasions were noted over the facial region and left auricle, Neck, suprasternal notch, & chest. Local tenderness and soft tissue swelling were present. Small embedded foreign bodies were suspected clinically. For which patient took treatment but all the stones were not removed by physician. No active major hemorrhage was observed. Facial nerve function was intact, and no neurological deficit was noted. Otoscopic examination revealed superficial foreign body fragments involving the left external ear region without tympanic membrane perforation.

Routine hematological investigations were within normal limits. Radiological evaluation aided localization of retained fragments within the superficial soft tissues of the face and left ear.

Surgical Management

The patient was taken for foreign body exploration and removal under sedation and aseptic precautions.

After wound preparation and draping, careful exploration of the facial wounds, Neck, upper eyelid, nose and left ear lesions was done. Multiple small irregular foreign body fragments consistent with blast debris were identified and removed. The extracted fragments varied in size and shape and were brownish metallic/stone-like particles embedded within the soft tissues.

Thorough irrigation and debridement of devitalized tissue were carried out using normal saline and povidone iodine. Hemostasis was achieved. Wounds were closed in layers.

Postoperative management included:

1. Broad-spectrum antibiotics
2. Analgesics and anti-inflammatory medications
3. Tetanus prophylaxis
4. Regular wound dressing and follow-up

The postoperative period was uneventful. The patient showed satisfactory wound healing without infection, hearing impairment, or facial deformity.

DISCUSSION

Blast injuries are categorized into primary, secondary, tertiary, and quaternary injuries. Retained foreign bodies are commonly associated with secondary blast injuries caused by projectiles and debris propelled by the explosion. In the head and neck region, such injuries may involve soft tissue, bone, facial nerves, eyes, and auditory structures.

Foreign body retention in facial tissues may present diagnostic challenges, especially when fragments are small or deeply embedded. Imaging modalities such as plain radiographs, ultrasonography, or computed tomography may aid localization depending on the nature of the material.

Management principles include:

1. Early wound assessment
2. Adequate imaging
3. Surgical exploration when indicated
4. Removal of accessible foreign material
5. Debridement and infection prevention
6. Preservation of cosmetic and functional structures

In pediatric patients, prompt treatment is particularly important to minimize long-term psychological and cosmetic consequences. Careful surgical handling is required around the auricle and facial soft tissues to avoid nerve injury and deformity.

The successful outcome in this case highlights the importance of early intervention, meticulous wound exploration, and comprehensive postoperative care in blast-related foreign body injuries.

CONCLUSION

Blast injuries involving the face and ear can lead to retained foreign bodies with significant potential morbidity. Early recognition, precise localization, and careful surgical removal are essential for favorable outcomes. Pediatric patients require special consideration because of anatomical vulnerability and cosmetic concerns. Prompt multidisciplinary management can effectively prevent complications and restore normal function. It is very important for parents and elders to educate about proper disposal of fireworks after use.

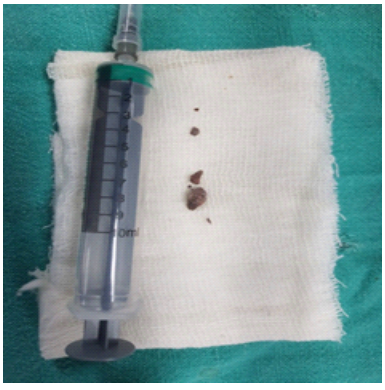
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fig.no. 1 post op picture of patient after FB removal



fig.no. 2 FB multiple small stones and blast debris



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