



CASE REPORT: ENDONASAL-ENDOSCOPIC REMOVAL OF A FOREIGN BODY (PEN TIP AND SPRING) FROM THE LEFT ORBITAL CAVITY

Navoi State University, Faculty of Medicine

Navoi City "Laser Med Center" Diagnostic and Treatment Center

Authors:

- *Ophthalmologist: Mahmudov Shukhratillo Inatilloevich*
- *Otorhinolaryngologist: Tursinboev Vokhidjon Urinboevich*

Introduction

Injuries among children, unfortunately, remain a common occurrence in modern society. According to statistical data, injuries to the eye and its surrounding structures account for approximately 20% of all pediatric trauma cases. This is particularly prevalent among preschool-aged children, who, due to lack of parental supervision, often accidentally injure themselves or their peers with sharp or cutting objects. Such incidents are frequently observed in daily medical practice.

Orbital (eye socket) injuries are classified as mild, moderate, or severe. In some cases, trauma to the orbital region can also involve adjacent structures, such as the facial bones, nasal cavities, and even the skull and brain. Injuries to the orbit may also affect surrounding anatomical structures, including the lacrimal sac, frontal sinus, maxillary sinus, and ethmoid sinus. In such cases, diagnostic imaging such as X-rays, MRI, or MSCT is essential, and a multidisciplinary approach involving ophthalmologists, otorhinolaryngologists, neurosurgeons, and maxillofacial surgeons is required for effective treatment.

This case report presents the successful management of a foreign body (pen tip and spring) lodged in the left orbital cavity of a pediatric patient, highlighting the importance of timely and specialized care.

Case Presentation



Patient: P.A., born in 2019.

Chief Complaint: Swelling and redness of the lower eyelid of the left eye, accompanied by nasal discharge.

History of Present Illness: The patient's mother reported that 22 days prior, the child was studying at home when he accidentally injured his left lower eyelid with the tip of a pen while playing. Following the injury, emergency services (103) were contacted, and the child was transported to an ophthalmology clinic. The wound was cleaned, and the patient was prescribed topical eye drops for outpatient treatment. Over the next few weeks, the family sought care at several private clinics and was eventually referred to our center for further evaluation.

Materials and Methods

Diagnostic Workup:

1. Ophthalmic Examination:

- Visual acuity: OD 1.0, OS 0.1.
- Intraocular pressure: OD 18.0 mmHg, OS 17.0 mmHg.
- Slit-lamp examination: Right eye (OD) showed clear optical media and normal fundus. Left eye (OS) exhibited redness and swelling of the lower eyelid, with a visible penetrating wound at the inner canthus. Conjunctival injection and chemosis were noted.

- Fundoscopy: Optic disc margins were slightly blurred, with mild hyperemia.

2. Imaging Studies:

- X-ray and MSCT scans revealed a foreign body (pen tip and spring) lodged in the left orbital cavity, extending into the adjacent sinus.

3. Laboratory Tests:

- Complete blood count, urinalysis, biochemical profile, hepatitis B and C screening, and antibiotic sensitivity testing were performed.

Consultations:

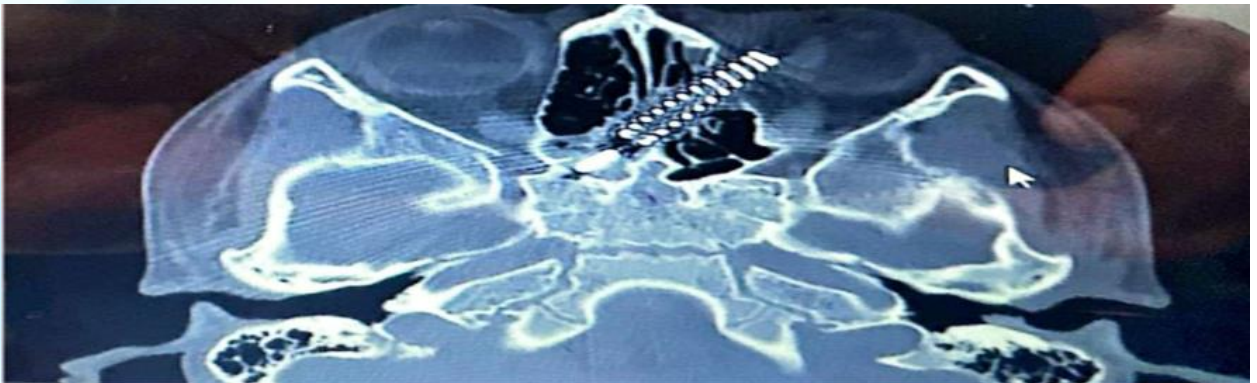
The patient was evaluated by a pediatrician and an anesthesiologist to ensure readiness for surgery.

Treatment

After obtaining informed consent from the parents, the patient was prepared for surgery under general anesthesia. The foreign body was successfully removed using an endonasal-endoscopic approach. Postoperatively, the patient received systemic and topical antibiotic therapy, as well as supportive care.

Postoperative Course

- **Day 1 Post-Op:** The left lower eyelid wound was clean, with reduced chemosis and conjunctival injection. Visual acuity: OD 1.0, OS 0.6.
- **Day 5 Post-Op:** The patient was in good general condition. The wound had healed completely, with minimal residual redness. Visual acuity: OD 1.0, OS 1.0.



Discussion

This case underscores the importance of timely and specialized care in managing ocular and orbital injuries, particularly in pediatric patients. The use of advanced diagnostic imaging (MSCT) and a multidisciplinary surgical approach enabled the successful removal of the foreign body and prevention of potential complications, such as infection or damage to adjacent structures.

The high incidence of injuries among children highlights the need for preventive measures, including parental education and public awareness campaigns. Healthcare providers, educators, and parents must work together to minimize the risk of such accidents.

Conclusion

- Orbital injuries require urgent and specialized care to prevent long-term complications.



- A multidisciplinary approach involving ophthalmologists, otorhinolaryngologists, and other specialists is essential for optimal outcomes.
- Preventive measures, including public education and awareness, are critical to reducing the incidence of pediatric injuries.

