

Removal of a retained wooden intraorbital foreign body using endoscopic guidance

Calista Nathasya G, Ghina Fedora, Dewinta RK, Yunia Irawati

Cipto Mangunkusumo National General Hospital, Jakarta, Indonesia

ABSTRACT

Objective: Wooden intraorbital foreign bodies (IOFBs) tend to break easily during surgical removal leaving behind splinters. Therefore, identifying the exact location of IOFBs using CT scan and endoscopy are important during removal. As wooden IOFBs are prone to infection, proper wound exploration and debridement, including antibiotics administration is a must to minimize postoperative complications. **Method:** We present a case of a 7-year-old boy with an injury on the right eye from a bamboo stick. Right eye examination showed the visual acuity was 2/60 with a normal IOP. Conjunctival and ciliary injection, chemosis were found. The foreign body was barely seen in the medial inferior of the right eye. Orbital CT scan confirmed the foreign body and showed a fracture of the anterior and lateral wall of the right maxillary sinus. Endoscopic examination of the right nasal cavity revealed a foreign body appeared extending from medial concha posteroinferiorly. The foreign body was pushed towards conjunctiva using rasparator with endoscopic guidance and was removed completely through the conjunctiva. Peritomy was performed followed by globe exploration. Sclera was found intact during exploration with no rupture identified. Postoperatively, the patient was treated with intravenous antibiotics. **Results:** Identification of foreign body was confirmed using an orbital CT scan. We successfully extracted a 5.5 x 1.2 cm wooden IOFB using endoscopy to prevent causing further orbital injury, proceeded with wound exploration in search of splinters. Visual acuity showed improvement after surgery. **Conclusion:** CT scan and endoscopic-guided surgery are useful in identifying and removing IOFBs. Wound debridement and exploration are necessary to prevent infection and detecting any splinters.

KEY WORDS:

Endoscopy-guided surgery, intraorbital foreign body, wooden foreign body

Retrospective study of predisposing factors, microbiological spectrum, infective focus and treatment outcomes of endogenous endophthalmitis over a 6-year period

Vyping Ang, Rasid Noor Khairul, Tze Huei Kee, Yee Ping Tan

Hospital Pulau Pinang, Kementerian Kesihatan Malaysia

ABSTRACT

Objective: To evaluate the systemic predisposing factors, causative organisms, infective sources and outcomes of endogenous endophthalmitis in Hospital Pulau Pinang over a 6 years period. **Method:** A retrospective study of consecutive cases of endogenous endophthalmitis in Hospital Pulau Pinang from May 2012 to May 2018. **Results:** A total of 20 eyes of 18 patients (two with bilateral involvement) were identified to have endogenous endophthalmitis during the study period. The mean age was 53.5 years old (range from 7 months to 81 years old). There were 55.5% males. There were Malay (66.7%), Chinese (22.2%) and Indian (11.1%). The systemic predisposing factors included diabetes mellitus (66.7%), liver abscess (16.7%), malignancies (11.1%) and others (5.5%). Gram-negative organisms were found to be the causative microorganism in 8 cases (44.4%) and gram-positive organisms in 6 cases (33.3%). The most common microorganisms were *Klebsiella pneumonia* (3 cases) and Group B streptococcus (3 cases), followed by *Burkholderia pseudomallei* (2 cases) and *Escherichia coli* (2 cases) and others. Infective foci were identified in 14 patients. The common primary focus was the urinary tract (15%) and lungs (15%) and followed by liver (10%) and brain (10%). Vitrectomy was performed in 4 eyes (20%) and 4 eyes (20%) were eviscerated, 8 eyes (40%) improved with medical treatment. Visual outcome at follow up was generally poor. 9 eyes (45%) had VA of NPL, 7 eyes (35%) between hand movement and perception of light. **Conclusion:** Our series showed diabetes mellitus and gram-negative bacteria were common from varies infective foci. Despite treatment, the visual outcome of our series was generally poor.