

## **Missed Foreign Body Presenting as a Chronically Painful Hand. A Case Report**

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**Missed foreign bodies are common. They may remain asymptomatic or else lead to wide range of complications. We present an 8- years boy who suffered from chronic pain in his right hand case due to a missed foreign body.**

### **Introduction**

Foreign bodies might accidentally penetrate the hand and might get missed when patient initially reports. Missed foreign bodies may become symptomatic after varied periods and lead to complications of bones and joints, soft tissue, nerves and blood vessels. The management comprises of accurate preoperative localization and surgical exploration and removal.

### **Case report**

An 8-years old boy reported with about nine months history of getting pain in right hand on attempting to grip objects like handle of bicycle. There was no other significant past history. On examination, there was a 5 mm scar over the thenar eminence. The parents attributed this scar to injury, which was sustained while playing and managed by self-dressings. X-Rays of the right hand AP (Figures 1 and 2) view showed a radiopaque foreign body on the volar aspect of proximal right hand in relation to carpal bones and carpometacarpal joint. No bony injury was seen.



**Figure 1.** X-Ray right hand AP view shows a radiopaque foreign body in relation to carpal bones and carpometacarpal joint



**Figure 2.** Lateral view (Figure 2) shows the foreign body seen on AP view to lie on the volar aspect.



**Figure 3.** Glass piece removed from the hand of the patient

The patient was operated upon under general anesthesia with proximal tourniquet haemostatic control and fluoroscopic guidance. Magnification was achieved with the help of magnifying loupes. A glass piece measuring 11mmx9mmx2mm was recovered. There were no perioperative complications and the patient was asymptomatic and pain free when reviewed three months follow-up.

### Discussion

Accidental penetration of the hand by foreign body is common, especially in children<sup>1,2</sup>. The patient may report at the time of injury when foreign body was detected on the basis of history, clinical examination<sup>3</sup> and imaging<sup>4</sup>. The foreign bodies may however be missed initially, particularly if these are not radio opaque such as thorns and wooden pieces<sup>5</sup>. A missed foreign body in fact forms a major cause of litigation against emergency physicians<sup>6</sup>. The patient may remain asymptomatic or with passage of time, develop wide range of complications including pain, abscess, chronic discharging wound, necrotizing fasciitis<sup>7</sup>, bone and joint destructive lesions<sup>1,8</sup>, migration<sup>9,10</sup>, granulomas<sup>11</sup>, delayed tendon ruptures<sup>10,12</sup>, neurodeficits<sup>9,13,14</sup>, and vascular events<sup>2</sup>.

Accurate preoperative localization is the key to successful surgical removal of foreign body as error at this stage can result in long intraoperative searches and extensive damage to soft tissues<sup>15</sup>. A foreign body may remain undetected even after thorough exploration<sup>5</sup>.

### Conclusion

- The possibility of presence of a foreign body should always be considered seriously at the time of initial management of wounds to prevent complications and future litigations.
- Presence of a foreign body should always be kept in mind as a differential diagnosis while evaluating cases of unexplained pain in hands and elsewhere.

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