

Penetrating facial injury

A 20-year-old motorcycle messenger crashed into a truck transporting structural pipes. Accidentally a 3 cm diameter pipe penetrated his right inferior orbit and soft tissue below the left posterior lateral neck.

When he arrived at the emergency room, there was a blunt wound with active bleeding in his right zygoma and haematoma in his left neck.

On CT the metallic pipe passed through the inferior portion of the right orbit, right maxillary sinus, right posterior nasal cavity, nasopharynx, left prevertebral region and left posterior lateral cervical space with multiple facial bone fractures (figure 1).

We performed angiography for embolisation, which showed extravasation of contrast media in the right internal maxillary artery (figure 2).

After particle embolisation, the removal of the foreign body, open reduction and rigid fixation were done.

Facial injuries often result in haemorrhage, which can be fatal and may result in brain hypoperfusion as well as secondary brain injuries. Most of them can be managed with effective compression or packing. And angioembolisation decreases the need for blood transfusion and provides an effective alternative for early haemostasis after packing failure, which might reduce hypoperfusion time and prevent secondary brain injury.¹ So angioembolisation has been reported as the primary choice for massive traumatic facial bleeding.

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Contributors HWC performed the procedure and submitted the manuscript. BK assisted in the procedure and wrote the draft. SJK and SIS prepared and edited the manuscript. THC performed operation, revised the manuscript and gave advice.

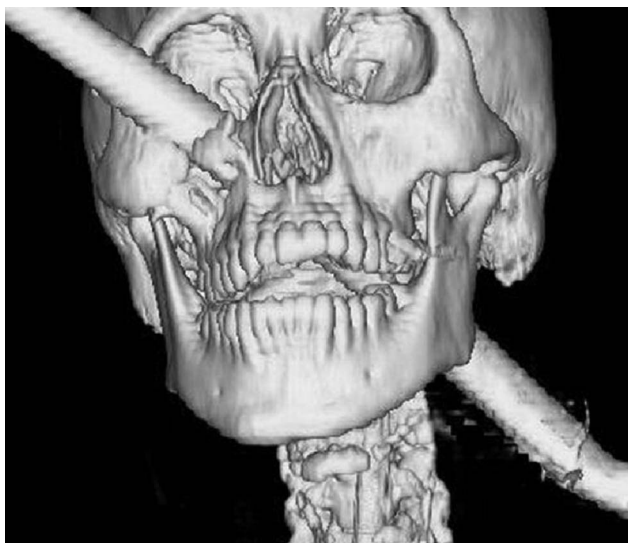


Figure 1 CT scan volume rendering image of the patient shows a metallic pipe passed through the facial bone.

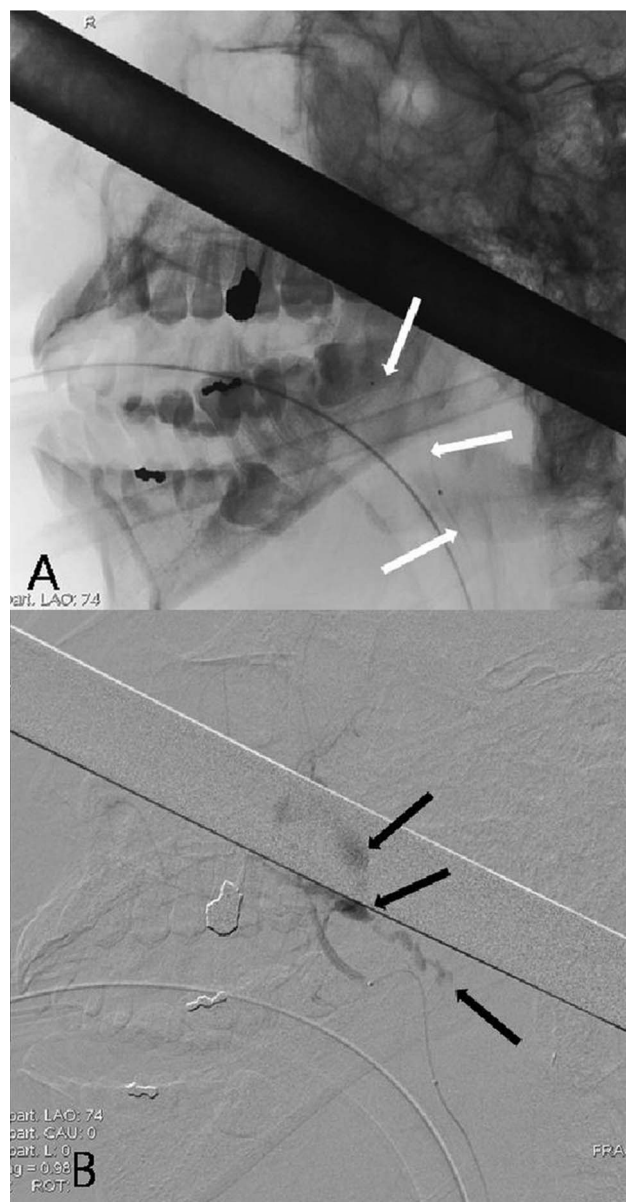


Figure 2 Native image (A) and digital subtraction angiography (B) show microcatheter placed in the left internal maxillary artery (white arrows) and active contrast media extravasation (black arrows).

Competing interests None.

Patient consent Obtained.

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Study approval Keimyung University Dong San Medical Center review board thought the study approval could be waived.



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