

Idiopathic fragmentation of mandibular fossa: a case report



Hani Surianti, Hsue Shui-Sang, Chiaming Chang,
Ina Peiying Chang, Michael Yuanchien Chen
Taichung China Medical University Hospital, Taiwan
2 Yu h-Der Road , Taichung City, Taiwan 40447



Introduction

This is a case report describing a rare phenomenon in which a piece of bone idiopathically fragmented from the roof of mandibular fossa causing malocclusion and limitation of mouth opening.

Case Report



Figure 1. This is a 46 year old male without any systemic disease or trauma history complained of malocclusion subsequent to sudden pain with loud cracking sound at right preauricular area after yawning the night before first visit.



Figure 2. Panoramic x-ray showed no structural deformities of bilateral TMJs.

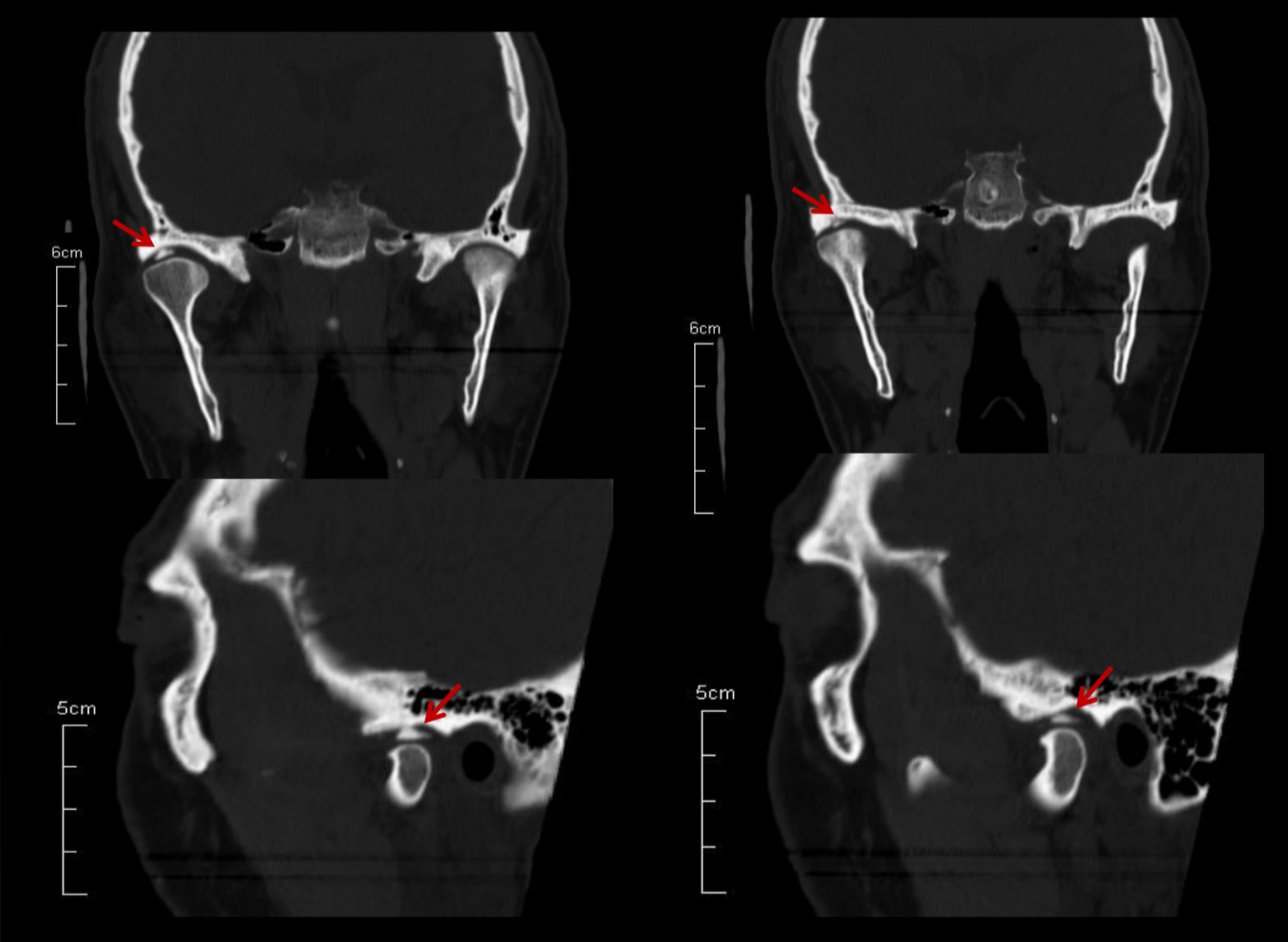


Figure 3. CT coronal and sagittal view showed a hyperdense image located between the right side condylar head and mandibular fossa. Irregularities on the surface of the mandibular fossa was also noted. Hypothesis of the hyperdense object as a fragment originated from the roof of mandibular fossa was suggested.

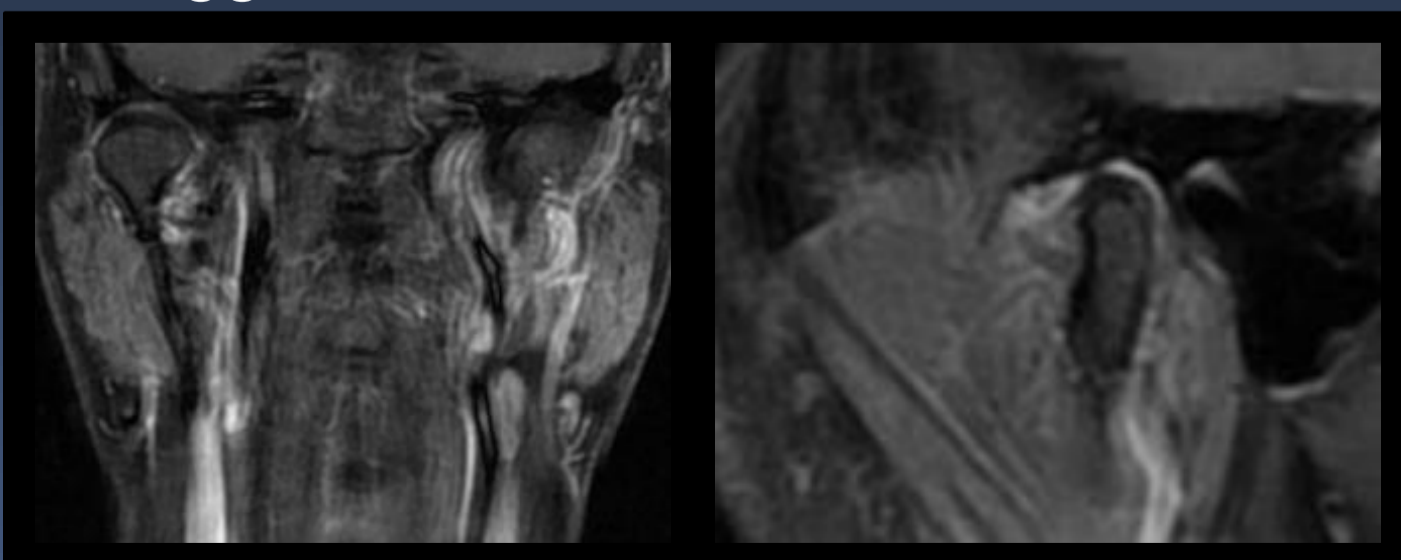


Figure 4. MRI image showed intact articular disc surface with no signs of perforation, proving the fragment definitely fell from the roof of the mandibular fossa into the superior joint space.

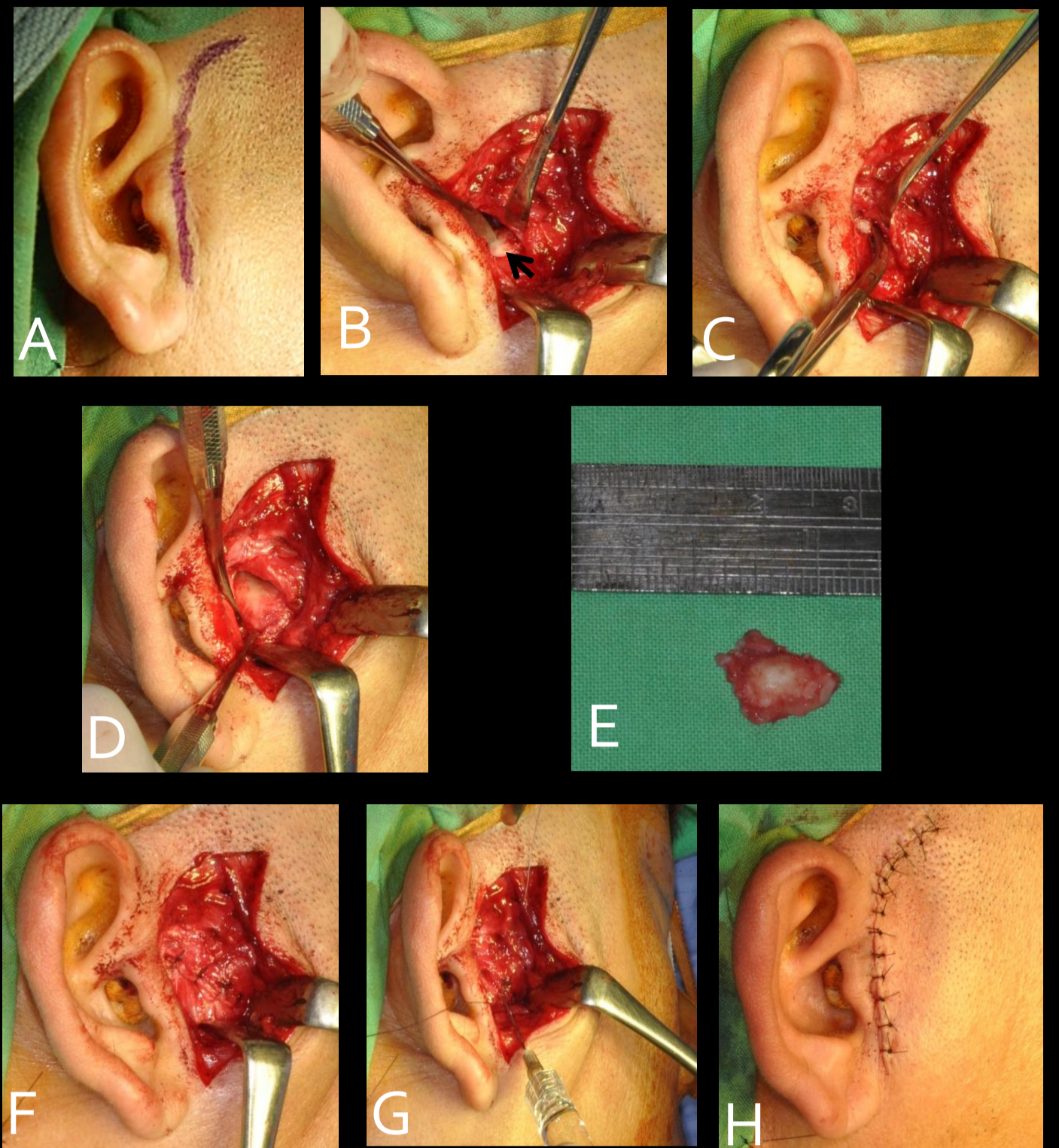


Figure 5. (A) Preauricular incision line was made. (B) After approaching the superior joint space, a white object was noted. (as the black arrows pointed) (C) The object was identified and was clamped with surgical instrument. (D) The disc surface was intact without signs of perforation. (E) The size of the specimen is about 1 cm in greatest dimension. (F) Closure of the joint capsule after removal of the object. (G) Injection with 1 mL of hyaluronic acid into the superior joint space. (H) Final skin layer closure.

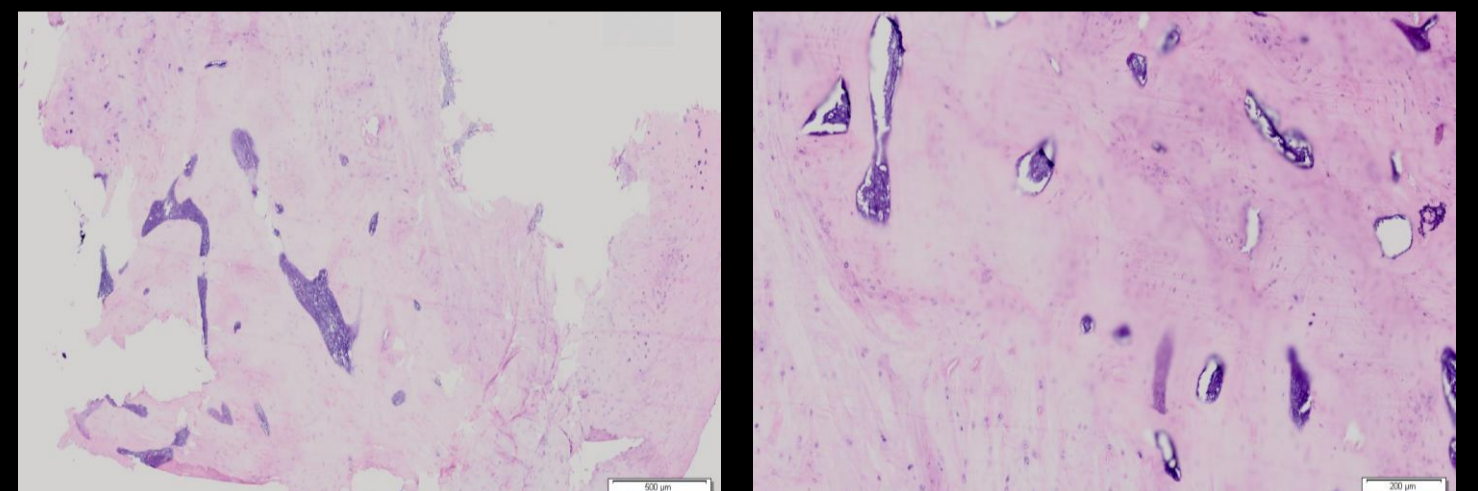


Figure 6. The histopathology report showed normal histology of bone fragment.



Figure 7. Post-operative 6 weeks follow up showed (A) minimal scarring of the wound condition. (B) Maximum intercuspation opening returned to normal. (C) (D) (E) Occlusion also returned to normal.

Conclusion

So far, there is no literature reporting similar situation and the mechanism of how the mandibular fossa fragmented into the superior joint space is yet to be determined.