

[NM-150] Pencil in the orbit: Do you remove it in the CT scanner?

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Introduction: Penetrating injury to the orbit in the absence of trauma to the globe can initially appear trivial, but subsequent complications can be severe. According to the closed claims analysis, the risk of a cardiovascular event during anesthesia in a remote location is 7-fold as that compared with the risk in the operating room. **Case Report:** We present a case of a previously healthy 9 y.o. boy who sustained a penetrating injury to the right orbit. CT angiogram of the head revealed a pencil embedded between the nose and right eye with its tip in the intracranial cavity, in close proximity to the right internal carotid artery and cavernous sinus. There was no evidence of hemorrhage or hemodynamic instability, and decision was made to perform percutaneous removal of the pencil under anesthesia in CT with immediate post procedural imaging. In addition, there was plan for OR wound exploration, assessment of CSF leak, and possible craniotomy once the foreign body was removed. Pre-operatively, his vital signs were within normal limits and his physical exam was remarkable for absence of light perception and extraocular movements on the right. Due to the nature of the injury and proximity to major intracranial structures, the child was taken to the OR for induction, intubation, and additional IV access. IV induction was achieved with fentanyl, propofol, and rocuronium and he was intubated without complications. Three large bore PIVs and a radial arterial line were placed. The patient was connected to a rapid fluid infuser and blood products were available. Anesthesia was maintained with IV propofol infusion and the patient was transported to the CT scanner. He was placed in the scanner and the pencil was removed by the neurosurgeon. The patient immediately became bradycardic, but recovered after 400 mcg of atropine. There were no signs of intracranial bleed or lesions that warranted craniotomy. He was taken back to the OR where the ophthalmologist performed I&D and closure of the wound. The child was extubated without complications in the OR and transported to the ICU. The patient lost his right vision and he is being followed for a pseudoaneurysm. **Discussion:** As procedures outside the operating room are becoming more invasive, the risk of hemodynamic instability increases. Thus, the standard practice regarding monitoring and therapeutic measures has to be questioned, and advanced techniques may need to be implemented.

References:

1. Monitoring the patient at risk of hemodynamic instability in remote locations. *Int. Anesthesiol Clin.* 2012; 50(2): 141-72.
2. Management of orbital-cranial trauma. *Adv Ophthalmic Plast Reconstr Surg.* 1987;7:3-26.

Image size: 512 x 512 SA 4813SE (9 y , 9 y)
View size: 413 x 134013 ANGIO NECK WITH TEST BOLUS -- SAG COW MPVR
WL: 199 WW: 550 0
852

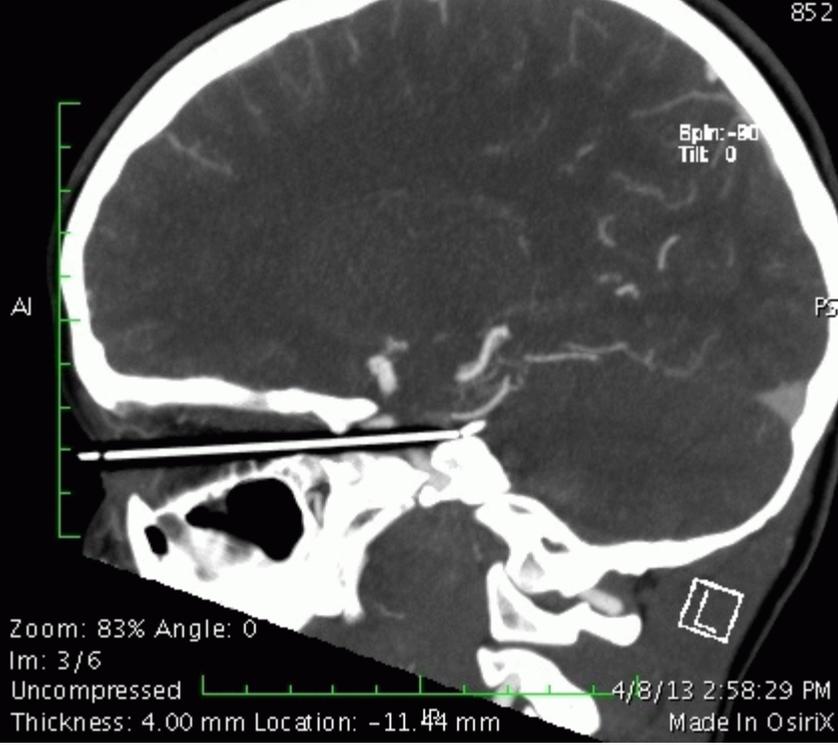


Image size: 512 x 512 AI 4813SE (9 y , 9 y)
View size: 440 x 134013 ANGIO NECK WITH TEST BOLUS -- AX COW MPVR
WL: 229 WW: 976 0
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