Twisted steel–induced penetrating head injury

A twisted steel bar [1 m long with a diameter of 2.5 cm] was inserted into the head of patient (A, B). CT scans show the location of steel bar, left side of optic canal (C, green arrow), internal carotid artery (D, white arrow), and cavernous sinus (E, red arrow).

Penetrating head injury causes complex injuries and high mortality. A 47-year-old man presented after a fall from a 4-meter-high construction scaffold with a twisted steel bar in his head (figure, A and B). The only focal neurologic deficit was a fixed and dilated left pupil. CT imaging revealed interruption of left optic canal (figure, C) without involvement of left internal carotid artery (figure, D) or cavernous sinus (figure, E). After a combined neurosurgical and maxillofacial operation, the patient recovered without intracranial infection or abscess, CSF leakage, or epilepsy. Except for left eye blindness, no neurologic sequelae were observed 1 month after surgery.

Peng Luo, MD, Zhou Fei, PhD, MD
From Xijing Hospital, Fourth Military Medical University, Xi’an, P.R. China.

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Correspondence to Dr. Fei: zhoufei@fmmu.edu.cn

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Peng Luo and Zhou Fei
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