

Asymptomatic intrapetrous carotid artery stenosis after a gunshot to the head

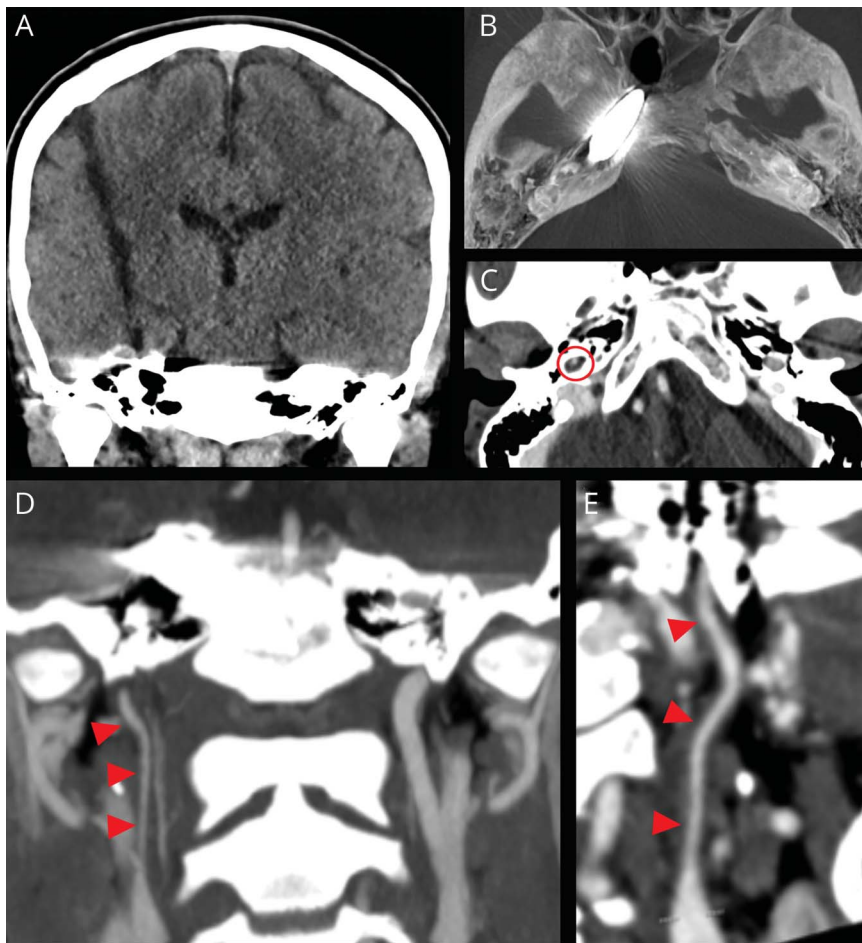
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Figure Imaging



Standard CT shows a coronal view of bullet's intracranial trajectory (A); maximum intensity projection CT shows the bullet retained intracranially within the right petrous apex (B); axial (C), coronal (D), and sagittal (E) view of CT angiography demonstrate the narrowed concentric lumen of the intrapetrous (C, red circle), and cervical (D, E, red arrowheads) tracts of the right internal carotid artery, consistent with dissection.

An 11-year-old girl was accidentally hit by a gunshot. Immediately after the injury, she developed a transient headache, vomiting, and a reduced level of consciousness. The neurologic examination was otherwise normal. A cerebral CT angiography showed the parenchymal course of the bullet from the right parietal region to the right petrous apex, without bleeding. The cervical, intrapetrous, and intracavernous segments of the internal carotid artery showed a residual concentric

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From the Neurosurgery Unit (A.D.B., A. Carai, C.E.M.), Department of Neurological and Psychiatric Sciences (A.D.B., A. Carai, C.E.M.), and Neuroradiology Unit (G.S.C., A. Carboni), Imaging Department, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy.

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lumen of 1–2 mm, indicating a plausible mechanism of post-traumatic dissection, secondary to the energy transference from the bullet to surrounding structures (figure). After 6 months, the patient was neurologically normal. This case shows an exceptional, but potentially lethal event.^{1,2} Three-dimensional neuroradiologic rendering was helpful in evaluating the neurovascular relationships of the bullet (video 1).

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Appendix (continued)

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