

CASE 12

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This 32 year old male had a head injury in a mine accident in September 1948. He was unconscious and in shock immediately after the injury. Several days later examination showed ecchymosis about both orbits, bilateral subconjunctival hemorrhage, old clotted blood in right external auditory canal and right nostril. There was bilateral VIth nerve palsy, slight facial weakness on the left, and impaired hearing on the right. Spinal tap showed 170 mm. CSF pressure, xanthochromic fluid and total protein of 150 mg.%. X-rays of the skull showed a fracture, possibly extending into the right orbit. He developed proptosis of the right eye, associated with bruit, and subsequently the right common carotid artery was ligated, following which a transient left bruit developed.

Eight years later, he complained of a pounding sensation synchronous with the pulse, which he heard in his right ear. The proptosis of the right eye remained unchanged over the last 5 years, he had double vision at times, impaired hearing on the right, and anosmia. There was enlargement of the orbital veins in upper and lower lids.

Nine years after the accident right carotid arteriogram showed complete occlusion of the right internal carotid artery, but the dye in the right external carotid artery went through the orbital-ophthalmic system to enter the fistula in the right cavernous sinus. The right external carotid artery was ligated, but a retrograde injection of dye down the common carotid filled the right vertebral artery and showed a massively enlarged posterior communicating artery feeding into the fistula in the right cavernous sinus.

Twelve years after the accident ligation of the intracranial portion of the right internal carotid and ophthalmic arteries was performed. The patient did not regain consciousness. Pupils were dilated and fixed and there were bilateral Babinski signs. He developed decerebrate posturing, progressively deteriorated, and expired the following morning.

At autopsy there was a massive right intracerebral hemorrhage. The right middle cerebral artery was completely occluded, thin and white, resembling a small string for 2 cm. distal to the basal penetrating branches. The sections are of the occluded artery stained by H&E and elastica-Van Gieson.