

# A Case of Traumatic Chiasmal Syndrome

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**Abstract :** A rare case of traumatic chiasmal syndrome with a front basal skull fracture is described. A 57-year-old male presented with frontal head trauma due to being hit with a 1,000 kg metal bar at a construction site. He suffered a basal skull fracture from the planum sphenoidale to the sella turica, and a CT scan revealed traumatic SAH, pneumocephalus and a cerebral contusion. We treated him conservatively. He suffered acute renal failure with crush syndrome. The patient was therefore referred to our hospital. On admission, he underwent hemodialysis every day and his renal function improved. His consciousness improved gradually. He later complained of bitemporal hemianopsia. An MRI showed a low intensity area on the T1-weighted image and a high intensity area on the T2-weighted image in optic chiasma. We diagnosed the patient to have traumatic chiasmal syndrome. We therefore confirmed the mechanism by which a direct injury of the basal skull caused a fracture, shear injury and circulatory obstruction of the prechiasmal plexus.

**Key words :** Traumatic chiasmal syndrome, Bitemporal hemianopsia, MRI