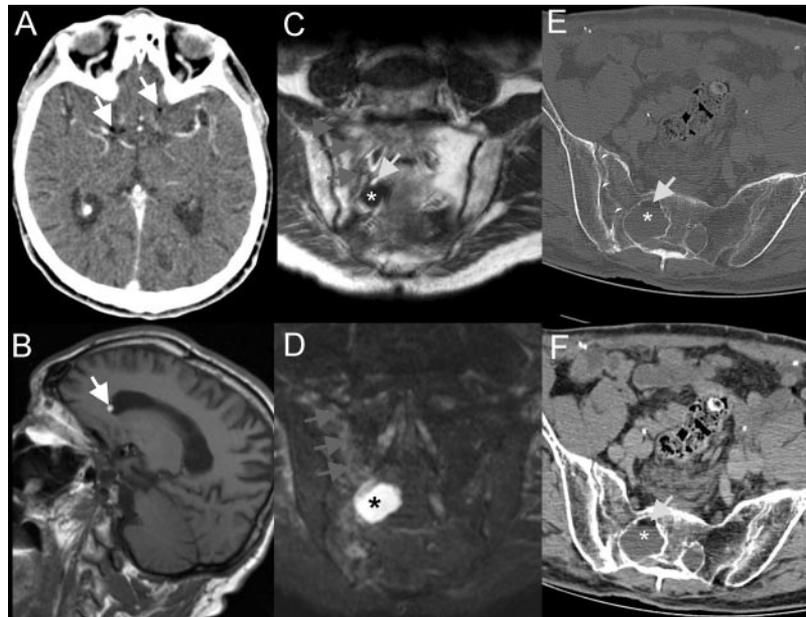


Subarachnoid fat

Unusual migration from pelvis to brain

Figure Subarachnoid migration of fatty material from a pelvic fracture



Fat droplets (white arrows) appearing hypodense on transverse CT (A) and hyperintense on sagittal T1-weighted MRI (B) were demonstrated within cerebral ventricles and subarachnoid spaces. Coronal oblique T1-weighted (C) and STIR (D) MRI as well as transverse CT (E, F) revealed a sacral fracture (arrowheads) extending through an S2 Tarlov cyst (asterisk) containing a small amount of fat (black arrow).

A 77-year-old man was admitted after a fall in which he struck his head and pelvis. Neurologic examination was unremarkable. CT and MRI scans of the head (figure, A and B) revealed fat droplets in the cerebral ventricles and subarachnoid spaces. CT and MRI scans of the pelvis (figure, C–F) demonstrated a sacral fracture extending into a Tarlov (perineurial) cyst within the S2 foramen.

We hypothesize that fatty bone marrow migrated from the fracture site to brain through a meningeal breach at the Tarlov cyst. No specific treatment was required.

Dissemination of free fatty material from the spinal subarachnoid space to the brain has been previously reported in a patient with spina bifida occulta following a traumatic sacral pseudomeningocele¹ and following the rupture of spinal dermoid tumors.²

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