Ventriculoiliac shunt

Additional distal sites for placement of CSF diversionary shunts may be necessary in some patients.

A study aimed to investigate the marrow space of the ilium as a potential receptacle for CSF in patients with hydrocephalus.

Cannulation of the marrow space of the ilium was performed in 5 fresh human cadavers less than 4 hours from time of death. Tap water was infused via a metal trocar for approximately 60 minutes.

A total of 30 L of water was easily injected into all cadaveric specimens without overflow from the infusion site or noticeable edema of the body. Upon inspection of the thoracic and abdominal cavities, no fluid accumulation was identified, ensuring that all infused fluid had gone into the vascular system.

Based on this cadaveric study, the ilium appears to be an ideal location for placement of the distal end of a CSF diversionary shunt when other anatomical receptacles are not an option. In vivo human studies are now required to verify these findings [1)].

1)
Tubbs RS, Tubbs I, Loukas M, Cohen-Gadol AA. Ventriculoiliac shunt: a cadaveric feasibility study. J Neurosurg Pediatr. 2015 Mar;15(3):310-2. doi: 10.3171/2014.10.PEDS14252. Epub 2015 Jan 2. PubMed PMID: 25555117.