Most shunt systems have an access port that can be percutaneously tapped. Tapping the shunt can yield valuable information as to its function and whether an infection is present. The fear of causing a shunt infection by tapping may limit the physician's willingness to do so.

CSF specimens obtained from tapping an indwelling CSF-diverting shunt during the 2011 and 2012 calendar years were identified and matched with clinical information. A culture-positive CSF sample was defined as an infection. If results were equivocal, such as a broth-only-positive culture, a repeat CSF specimen was examined. The CSF was obtained by tapping the shunt access port with a 25-gauge butterfly needle after prepping the unshaven skin with chlorhexidine.

During the study period, 266 children underwent 542 shunt taps. With 541 taps, no clinical evidence of a subsequent shunt infection was found. One child's CSF went from sterile to infected 11 days later; however, this patient had redness along the shunt tract at the time of the initial sterile tap.

The risk of infection from tapping a shunt is remote if the procedure is done correctly ¹⁾.

Miller et al., have shown that it is possible to evaluate the majority of ventricular shunt malfunctions without tapping the device. Because it is possible to diagnose shunt obstruction correctly by other means, the shunt tap may not be obligatory as a routine test of the device's patency².

References

1)

Spiegelman L, Asija R, Da Silva SL, Krieger MD, McComb JG. What is the risk of infecting a cerebrospinal fluid-diverting shunt with percutaneous tapping? J Neurosurg Pediatr. 2014 Oct;14(4):336-9. doi: 10.3171/2014.7.PEDS13612. Epub 2014 Aug 8. PubMed PMID: 25105511.

Miller JP, Fulop SC, Dashti SR, Robinson S, Cohen AR. Rethinking the indications for the ventriculoperitoneal shunt tap. J Neurosurg Pediatr. 2008 Jun;1(6):435-8. doi: 10.3171/PED/2008/1/6/435. PubMed PMID: 18518692.

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