

# Lateral ventricle puncture (pediatrics)

## Indication

- emergent puncture of non-communicating hydrocephalus with symptoms of intracranial hypertension
- diagnosis of ventriculitis
- intraventricular administration of drugs
- progredující posthemoragický hydrocefalus, kdy již nejsou možné opakované lumbar puncture are no longer possible and the patient's condition does not allow the introduction of a ventriculoperitoneal shunt.

## Contraindication

- inflammatory skin changes in the injection area
- narrow lateral ventricles

## Method

- the patient is in a horizontal position on his back
- the assistant firmly fixes the head
- aseptically prepare the puncture site (disinfect the area of the large fontanel and its surroundings)
- we will use a 5 cm long lumbar needle for the puncture
- the injection site is at the junction of the two lateral corners of the large fontanel about 1.5 cm from the midline
- we make the injection perpendicular to the surface of the head, i.e. the tip of the needle points to the inner corner of the eye on the same side (the chamber is reached at a depth of 2 to 4 cm, depending on the size of the chambers)
- in the correct position, when the chuck is pulled out, the liquid flows out
- after completing the collection or administration of drugs, we insert the stylet and pull out the needle
- cover the injection site sterilely
- the patient continues to remain in a horizontal supine position
- after two unsuccessful attempts, the puncture on the same side is not continued
- if the large fontanelle is closed and the procedure is unavoidable, trepanopuncture must be performed

## Complication

- brain tissue and vascular injury
- sagittal sinus injury

## Links

## Source

- HAVRÁNEK, Jiří: *Puncture of the lateral cerebral ventricle* . (edited)

## related articles

- Hydrocephalus
- Purulent meningitis (pediatrics)
- Cerebrospinal fluid



Hydrocephalus