

Kids Brain Doc

Dr. Laila Mohammad

Ventriculo-Peritoneal Shunt (VPS)

Patient Packet



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CEREBROSPINAL FLUID (CSF)



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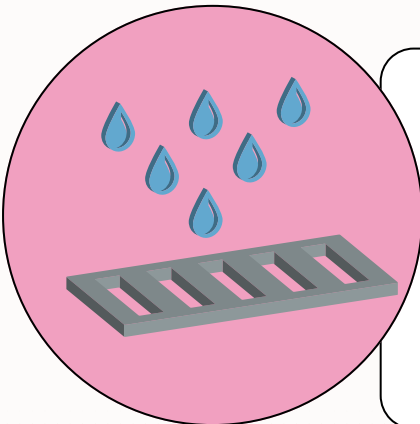
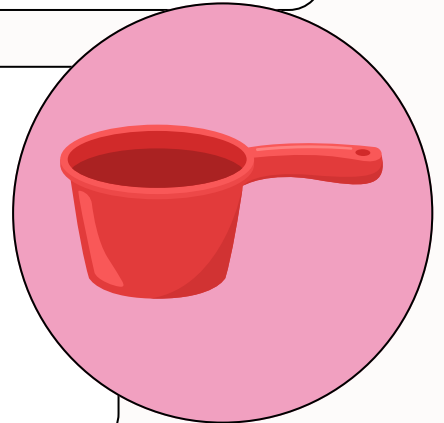


01. WHAT IS IT

A clear liquid that surrounds the brain and spinal cord. It cushions the brain, protects it from injury, and helps move nutrients and waste in and out.

02. HOW MUCH DO WE HAVE

You produce about 15-20 mL (1 tablespoon) every hour. Over a whole day, that's about 500 mL (or 2 cups). However, at any one time, there's only about 150 mL (or 1/2 cup) around the brain and spinal cord.

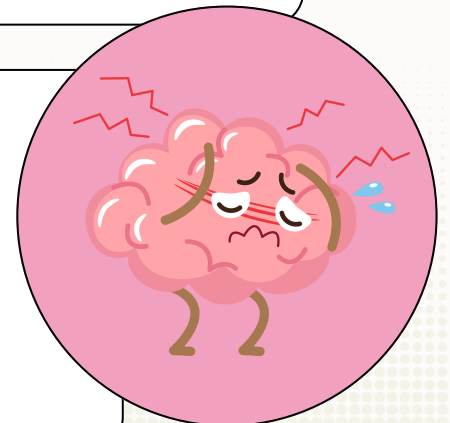


03. WHERE DOES THE EXTRA GO?

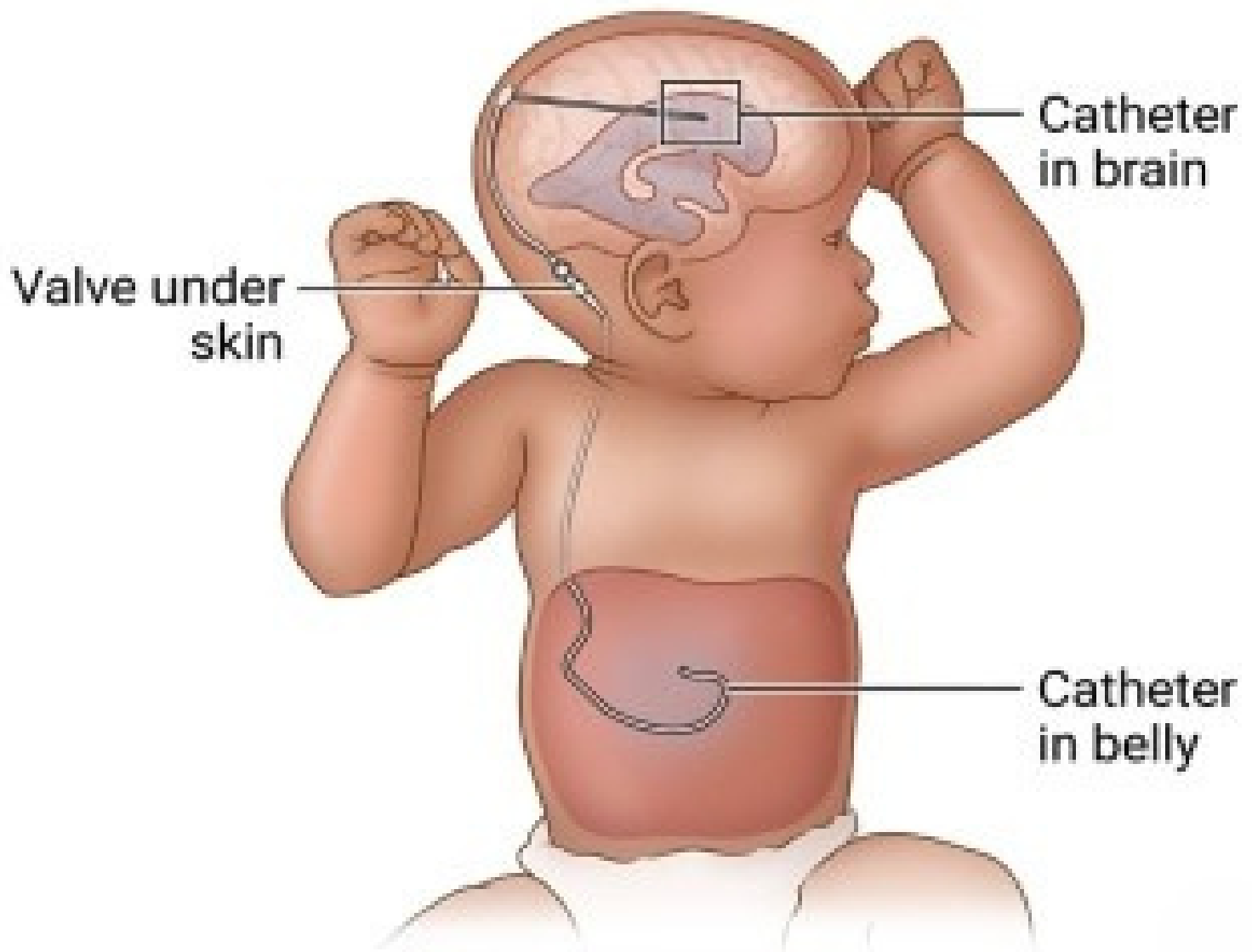
Since your body only needs a set amount, the "extra" drains away through the brain's natural gutters (arachnoid granulations), which carry the fluid back into the bloodstream to keep everything in balance.

04. WHY IS THIS IMPORTANT

If too much CSF builds up or doesn't drain well, it can put pressure on the brain. This might show up as headaches, vomiting, sleepiness, irritability, a bulging soft spot, or a quickly growing head size. This would need treatment.



Ventriculoperitoneal Shunt (VPS)



Surgery: VPS Insertion

1 Goals of Surgery

- Relieve fluid buildup and pressure in the brain
- This is done by moving extra fluid to another part of the body, where it can be safely absorbed.



2 Risks of Surgery

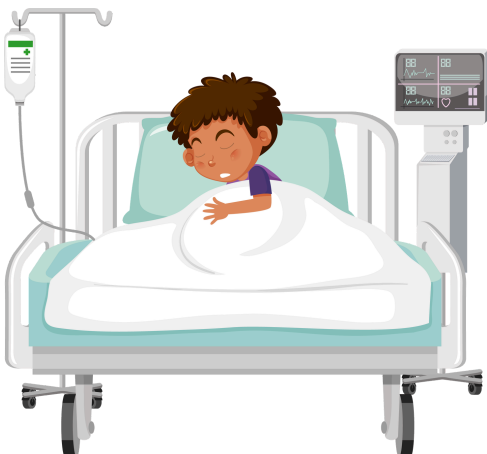
- Infection (give antibiotics before surgery), bleeding, headache, brain fluid leak, damage to the brain, injury to bowels
- Long-term: the VPS may need to be replaced over time, especially in children as they grow

3 Alternatives

- ETV - effectiveness depends on your child's anatomy and why there's fluid buildup (ETV Success Score).
- Observe - only if no signs of pressure

4 Right after Surgery

- Sitting with the head up to help the incision heal
- Pain medications: IV Tylenol, IV Toradol
- Antibiotics: 24 hours
- Check labs



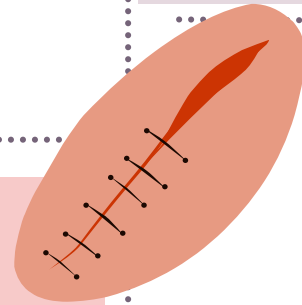
5 Hospital Recovery

- Once your child is taking all their medicine by mouth, eating/drinking, peeing, and moving okay, your child can go home.

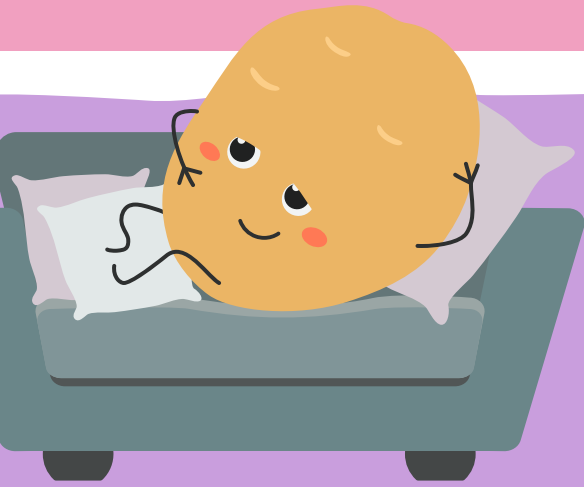


6 Incision Care

- Ok to shower 2 days after surgery. Wash daily.
- No bathing or soaking incision in tub for 4 weeks after surgery.
- Incision will fall off on its own in 3-4 weeks.
- No need to cover the incision.



Recovery & Follow-Up



ACTIVITY RESTRICTIONS

- Week 0-2: Couch potato
- Week 0-4: Light activity
- 1-3 months: Regular activity (keeping two feet on the ground - avoid jumping)
- At 3-months: Clear for all activities

HOME CARE

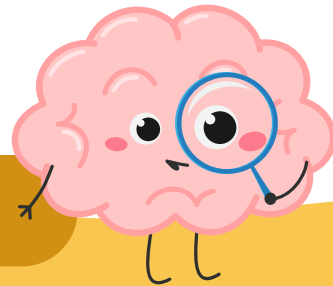
Will see in clinic for incision check at 2 weeks.
Can return to school or daycare after this appointment.

FOLLOW-UP

- 2-week: incision check
- 6-weeks
- 3 months
- Annual check-up



LONG-TERM CARE



- Return to sports: After 3 months, it's okay to return to non-contact sports.
 - At 6 months, it's okay to return to contact sports.
- Schedule annual eye exams to rule out pressure buildup in the optic nerve (*papilledema*) that could indicate increased pressure in the brain.
- Most children will live normal, active lives once fully healed.