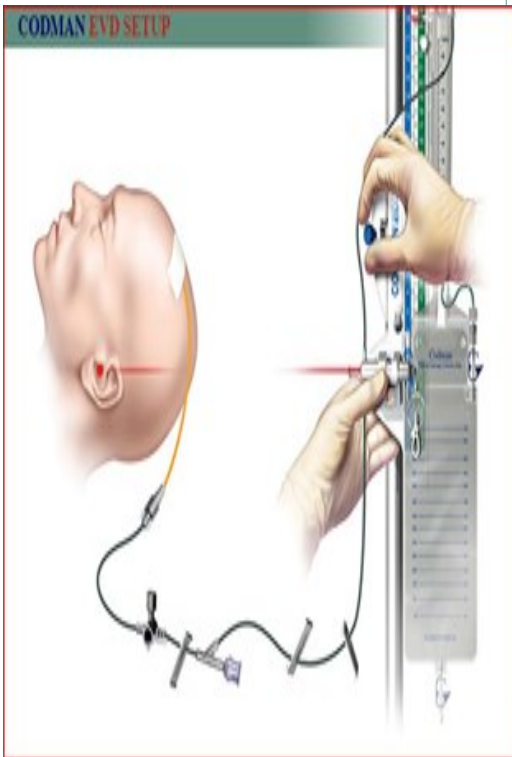




EXTERNAL VENTRICULAR DRAINAGE (EVD)



What is Cerebral Spinal Fluid (CSF)

There is 4 spaces in our brain that hold fluids. These are called ventricles. The fluid named CSF. CSF feeds with nutrient and cushion for brain and spinal cord.

What is External Ventricular Drain (EVD)

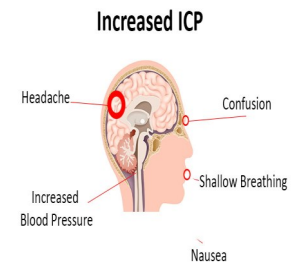
- ◆ EVD is an temporary way to drain CSF and relieve pressure cause by some infectious or injuries involving with brain.
- ◆ This is done by placing a flexible tube into the ventricle on right or left side of head.

What preparation are needed, prior to the procedure?

- ◆ MRI or CT Scan of the head
- ◆ Chest X-Ray
- ◆ ECG
- ◆ Routine blood and urine Analysis
- ◆ Fasting (6 hours)

Indication

- ◆ Hydrocephalus
- ◆ Brain Abscess
- ◆ Brain injury
- ◆ High Intracranial Pressure



During EVD procedure

- ◆ Patient will be under GA
- ◆ Patient will be in supine and head rest position.
- ◆ Patient head will be in lateral left or right according to operation site.
- ◆ A portion of the head will be shave.
- ◆ Surgeon makes a tiny incision in the scalp and drill 1 hole through the skull.
- ◆ The catheter will be inserted to drain the CSF fluid from inside the skull.
- ◆ Catheter is anchored and skin will be closed.
- ◆ Catheter is connected to drainage system.

Complication

- ◆ Bleeding
- ◆ Malplacement
- ◆ Obstruction
- ◆ Infection within the surgical wound
- ◆ Anesthetic complication
- ◆ Strokes
- ◆ Seizures
- ◆ Leakage of the CSF
- ◆ Accidental injury to the brain leading onto movement disorder, movement, weakness, memory related problem.



Post operative care

- ◆ The patient are send to post operative recovery area.
- ◆ The patient blood pressure, heart rate, and respiration closely monitored.

