External Ventricular Device (EVD)

Zeroing

- Raise or lower the system measured to the tragus of the ear
- Lower the Buretrol to the "zero point" on the system by pinching the tabs together above the buretrol and lowering inot alignment with zero on the device
- Turn the stopcock "off' to the patient (open to the Buretrol/transducer)
- Do **NOT** open the transducer to air (the transducer will be opened to air automatically through the cent on top of the Buretrol)
- Highlight the ICP box on the GE monitor screen and select "zero ICP" on the drop down menu choices. Wait for a "0" to appear on the monitor for the ICP reading.
- Replace the Buretrol to the position on the pole mount that has been ordered by the physician.
- Zero the ICP every 12 hours or with position change.

Leveling

- The transducer on the set-up is leveled to the patient's external auditory meatus.
- The "pressure level" indicator (located on the drop chamber of the collection system) is aligned to the ordered cm H2O above the external auditory meatus.
- If continuously draining CSF, turn the drain off to the patient momentarily to obtain the ICP reading.

External Ventricular Device (EVD) Cont...

Obtaining an ICP tracing

- Turn stopcock "off" to the drain and "open to the transducer to obtain an accurate ICP numerical value and waveform.
- The ICP numerical value and waveform should be obtained every hour.
  - ⇒ If there is an increase in intracranial pressure, then the value should be obtained more often (I.E. Q15 Minutes)

Draining CSF

- ***For Continuous ICP Measurements:***
  - ⇒ Keep the EVD stopcock "off" to drain and "open" to the transducer for continuous ICP monitoring.
  - ⇒ If ordered by MD, when the ICP reaches a specified pressure, "open" the stopcock to drain CSF for a short time period.
- ***Continuous CSF Drainage/Intermittent ICP Monitoring***
  - ⇒ The EVD stopcock is "off" to transducer
  - ⇒ The amount of CSF drainage is controlled by raising the pressure level on the graduated burette above the Foramen of Monro, which is the zero reference level.

The EVD device does not allow practitioner's to drain CSF and monitor ICP simultaneously.