

Trouble shooting Neurosurgical Shunt for Malfunction

Shunt malfunction may occur at ANY TIME after shunt placement with the risk of malfunction being the highest in the first 6 weeks post shunt surgery. Patient's symptoms are usually progressive, rarely intermittent. Distal malfunctions may be less acute.

Children strongly suspected of or known to have a shunt malfunction and appears to be in pain should **NOT** be given narcotics, as it may decrease their respiratory drive leading to respiratory arrest and/or herniation. For pain control provide non-narcotic or non-sedating medications.

Symptoms of shunt malfunction:

1. HA
2. Vomiting
3. Lethargy
4. New onset seizures (rare)

Possible signs of shunt malfunction:

- Decreased arousal on exam
- Full, taut or bulging fontanelle in neonate/infant
- "sundowning" (downward fixed gaze)

These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly these guidelines should guide care with the understanding that departures from them may be required at times.