

Brain Death Protocol

Definition: "An individual who has sustained irreversible cessation of all functions of the entire brain, including the brain stem, is dead." The Uniform Determination of Death Act, AMA, 1980

Refer to "Brain Death Protocol: Adults" in PolicyStat -AND- "Brain Death Protocol for Adult Patients" Checklist

****Prior to discussing brain death with family/next of kin, STICU intern must discuss potential diagnosis with Upper Level Resident, Trauma Nurse Practitioner or Attending. NO ONE is to discuss organ donation with family/next of kin, this will be done by Alabama Organ Center (AOC) upon declaration of brain death. ****

Clinical Diagnostic Criteria for Brain Death

1. Coma (GCS 3T) – flaccid paralysis, no eye opening/movement to noxious stimulus.
2. Absence of brainstem reflexes – non-reactive pupils, absent corneal reflexes, absent gag/cough, absent oculocephalic and oculovestibular responses, unresponsive to all stimuli. ****Spinal reflexes** may cause spontaneous movement or movement with painful stimulus (the persistence of spinal reflexes is not inconsistent with the diagnosis of brain death).
3. Apnea – no spontaneous respirations (see apnea testing).

Note: DO NOT have to wait six hours for another attending to complete second exam. Second attending signature can be from another specialty (Neurosurgery, Emergency Medicine).

Confirmatory Testing (Nuclear Perfusion Scan or Angiography)

Required for the diagnosis of brain death if clinical criteria cannot fully be met due to complicating medical conditions **that cannot be corrected** (see "prerequisites" on brain death protocol checklist) and/or hemodynamic instability during apnea testing. **DO NOT** order a confirmatory test without first discussing with attending.

- Absence of cerebral blood flow may be used to fulfill criteria for brain death for any patient who meets all criteria but has uncorrectable medical conditions (unknown cause of coma, severe acid-base abnormalities, severe electrolyte abnormalities, severe endocrine abnormalities, core body temperature <36 degrees C, systolic blood pressure < 100, intoxication, recent administration of sedating medication/neuromuscular blockers)
- If perfusion scan consistent with brain death and patient is AOC candidate then two attending must still complete clinical exam, may defer apnea testing.

Documentation of Brain Death

- Complete Brain Death Progress Note in EMR with trauma attending and obtain second attending exam if clinical findings consistent with brain death.
- A progress note describing the criteria used to establish the diagnosis of brain death must be entered in the chart prior to termination of ventilator support.
- Time of Death is time of first attending exam or time that perfusion scan is performed

After Brain Death is confirmed

- There is no ethical or legal obligation to continue mechanical ventilation or any drug therapy once the diagnosis of brain death has been made. However, such support may be prolonged to allow organ procurement for donation. Support may also be continued up to 24 hours, if there is no organ procurement, to allow family to arrive at the hospital.