**Catastrophic Brain Injury Guidelines**

**Background**

Catastrophic defined for this purpose as brain injury that is expected to result in a non-survivable neurological injury as determined by Neurosurgery, Trauma or ICU services after appropriate diagnostic studies and clinical examination

**Purpose of the guidelines**

To support the patient in order to allow time for family to gather at the bedside

To preserve the option for organ donation should the patient have designated him or herself or to allow the family the time needed to make this decision

**Goals of treatment**

MAP 65-75 mmHg

UOP of approximately 1 to 1.5 ml/kg/hour but no higher than 500 ml/hr

Na 135-145 meq/dl

Glucose 80-180 mg/dl

Temp 36.5-38 C

Cardiac Index greater than 2.2

Optimal fluid status

**Guidelines for treatment**

1. Notify WRTC when guidelines implemented
2. Recommend placing Flotrac
3. Maintain MAP goal
4. Start vasopressin 0.04 units/min
5. Add levophed to maintain MAP goal
6. If patient is in DI and MAP is greater than 75 mmHg start DDVAP 2 mcg subcutaneous
7. Start Nicardipine for MAP greater than 90 mmHg, titrate for MAP goal
8. Fluid replacement for DI- normal saline (Na < 145) 0.5 ml per ml urine
9. Fluid replacement for DI- ½ Normal saline (Na > 145) 0.5 ml per ml urine
10. Consider insulin drip protocol for glucose goal of 80-180 mg/dl
11. Initiate electrolyte protocol
12. Bair hugger for temperature less than 36.6 C
13. Consider starting levothyroxine drip for hormone replacement. Start at 10 mcg/hour increase to 40 mcg/hr over 4 hour
14. Consider starting Solumedrol 15mg/kg BID
15. Notify WRTC when guidelines are started (RN or MD)