

## Donor Management Guidelines and Protocols for Death by Neurological Criteria – Adults

Standard Monitoring	Vital Signs Parameters (Notify coordinator if outside goal)	
Continuous pulse oximetry Continuous cardiac monitor Continuous temp monitor Place arterial line Place CVC or PICC	Place Foley catheter to gravity Record vital signs hourly and PRN Record I/O's hourly Measure CVP Q2hrs and PRN (Subclavian or jugular preferred)	- HR 60 to 120 BPM - SBP > 100 mmHg - MAP > 65 mmHg - CVP 4 to 10 mmHg - Temp 36 to 38 C
		- SpO2 > 95% on lowest FiO2 - UOP _____ ml/hr - Normalized ABG - Serum Na < 155 - Serum Glucose 70-150
Nursing Orders		
ICU patient assessment per unit standard (omit neurological exam) Oral Care Q2hrs OGT/NGT to LIWS D/C intravascular cooling		Bed rotational module and/or lateral reposition Q2hrs Sequential intermittent compression devices
Serial Labs	Microbiology	
- CBC w/diff, PT/INR, PTT - Electrolytes, Ca, Mg, Phos - LFTS (including direct Bili) - Arterial blood gas - Cardiac enzymes - Amylase, Lipase - GGT, LDH, HgbA1C	Now and Q _____ Hours Now	Blood cultures x2 peripheral sites Sputum gram stain and C&S UA + urine C&S <u>Terminal UA just prior to OR</u> Additional cultures if appropriate:
<b>Type and Crossmatch for 2 Units PRBC (Hold for OR)</b>		
Diagnostics	Additional diagnostics/labs	
Portable Chest X-ray NOW and DAILY 12-lead EKG (heart donors) Transthoracic Echocardiogram		
Standing Medication Orders		
Methylprednisolone 1000 mg IV q12hrs Cefazolin 1000 mg IV Q 8 hrs IF PCN Allergy: Clindamycin 600 mg IV Q8 hrs or consult with hospital pharmacist for appropriate coverage Continue all previously ordered antibiotics and consult with hospital pharmacist on the appropriateness of ongoing coverage Continuous MIVF infusion of _____ at _____ ml/hr. Adjust for hourly total fluid goal of _____ ml/hr Continue all previous medications for blood pressure maintenance (e.g. Norepinephrine, Dopamine, Vasopressin, etc...) Initiate hospital-based electrolyte replacement protocol for potassium, magnesium, calcium and phosphorous Continue previous blood glucose management orders. If no glucose management orders and: Serum Glucose 100-200: start least aggressive Q 6hr subcutaneous regular human hospital insulin protocol Serum Glucose >200: start least aggressive insulin drip hospital protocol and escalate per protocol Discontinue all other previous medication orders unless specified by clinical coordinator Discontinue vasopressin infusion 1 hour prior to OR, no DDAVP 4 hours prior to OR Provide additional dose of cefazolin 1000 mg IVPB 1 hour prior to OR if not given within 6 hours of OR Provide additional dose of methylprednisolone 1000 mg IV 1 hour prior to OR if not given within 6 hours of OR		
Problem: Hypotension		
NOTE: In the presence of brain death, hypotension is normally distributive and hypovolemic in origin. FIRST LINE: If no history of cardiogenic shock, bolus 1000 ml NS or LR. Use CVP, UOP, and SBP goals as above to guide resuscitation Start Dopamine continuous IV infusion at 5 mcg/kg/min, titrate 2.5 mcg/kg/min q 15 min. Discontinue for HR > 120 If possible, wean norepinephrine continuous IV infusion to less than 10 mcg/min If excessive UOP and hypernatremia see below SECOND LINE: <b>Hormone Replacement</b> Give Levothyroxine 20 mcg IVPB over 15 minutes Start Levothyroxine (200 mcg/500 ml 0.9%Saline Solution) continuous IV infusion @ 10 mcg/hr, may increase to 20 mcg/hr Start Vasopressin at 0.04 units/min continuous IV infusion, may increase to 0.1 units/min. Notify coordinator if UOP < 100 ml/hr THIRD LINE: Start phenylephrine continuous IV infusion at 50 mcg/min and titrate q 5 min to maintain BP goals as above Obtain 2D Echocardiogram and cardiology consult, consider PA Catheter insertion or arterial wave form analysis		
Problem: Excessive UOP in presence of hypernatremia (Diabetes Insipidus)		
NOTE: DI is characterized by elevated UOP, urine specific gravity less than 1.005, rising serum sodium, serum osmolality > 300 mOsm/L Obtain STAT serum sodium, serum osmolality, and urine specific gravity Replace UOP ml for ml + _____ ml with _____. Start Vasopressin at 0.04 units/min continuous IV infusion, titrate up to max 0.1 units/min. Notify coordinator if UOP < 100 ml/hr DDAVP 2-4 mcg IVP q6hrs PRN. Do not give if UOP drops below 100 ml/hr. Increase electrolyte monitoring to q4hrs.		

**Respiratory Orders**

Elevate HOB to 30 degree angle  
Suction hourly or PRN using close-circuit device  
Chlorhexidine gluconate 0.12% oral rinse BID  
Overinflate ETT cuff to at least 25 mmHg  
Oral care q2hrs  
If bed has functions, use the chest PT option hourly.  
Continue any previous nebulized medication orders  
If no previous neb orders: start DuoNeb q4hrs

Vent orders: Parameters depend on current settings.  
Consult Attending MD to meet oxygenation goal of p/f >300 with PaO<sub>2</sub>>100 on lowest FiO<sub>2</sub>.  
Volume Control-specific orders:  
Adjust tidal volumes to 8-10 ml/kg ideal body weight  
Maintain Peak Inspiratory Pressure less than 30  
Adjust Ve to normalize PCO<sub>2</sub> and pH (slightly acidic preferred)

**Lung Donation Evaluation:**

100% challenge gas: increase FiO<sub>2</sub> to 100%, PEEP 5 (if tolerated). Draw ABG 30 minutes after vent change. Return vent to original settings.  
Bronchoscopy and pulmonology consultation: Assess anatomy, collect bronchial wash for cx, and clear mucus.  
Consult pharmacist on appropriate antibiotic for pneumonia prevention