

**VENTURA COUNTY MEDICAL CENTER
CLINICAL PRACTICE GUIDELINE/PROTOCOL**

MANAGEMENT OF THE POTENTIAL ORGAN DONOR

FIRST STEP - Determine Brain Death (See Brain Death Evaluation Guideline)

SECOND STEP – Check Labs, Resuscitate & Optimize Labs

- **Labs:** ABG, Serum Lactate, CBC, PT, PTT, & electrolytes (including Ca, Mg, Phos) Q 4 hours
- **Resuscitate & Optimize Labs** (continue through out process)
 - Bolus 1 Liter NS
 - Transfuse to maintain Hct >30
 - Control active bleeding
 - Place central line
 - Maintain MAP >70
 - Transfer to ICU
 - Protect from Hypothermia: warming blankets PRN (core temp 97-101F)
 - Protect from hypoxia: maintain SaO₂ >90%

THIRD STEP – Determine if MAP >70

- **MAP >70**
 - Continue to fluid resuscitate (NS or LR) & correct lab abnormalities as needed
 - Goals of resuscitation include:
 - Normalization of base deficit, lactate, CVP or PAOP 8-15 with minimal use of pressors (dopamine <5)
 - Rule of 100's: SBP >100mm Hg, U/O >100ml/hr, PaO₂ >100
- **MAP <70**
 - Continue to fluid resuscitate with NS & 5% albumin until MAP >70 with minimal pressors
 - Double dose of dopamine Q 5 minutes to maintain MAP >70 to max of 20µg/kg/min
 - If MAP <70 and Dopamine is at 20 µg/kg/min then start second drip.
 - Double drip Q 5 minutes to maintain MAP >70
 - Are CVP and/or PAOP (wedge) >17
 - NO: Continue to bolus with NS/Albumin
 - Yes: Does patient have symptoms and labs suggestive of diabetes insipidus?
 - No: Consider Norepinephrine if CI > 4
 - YES: See DI below (hypotensive)
 - Is patient requiring a combined total vasopressor need > 15 µg/kg/min to maintain SBP >100 after pretreatment to obtain CVP > 7 and/or PAOP > 12 mmHg?
 - No: Continue with Third Step
 - Yes: Proceed to T4 Treatment while continuing with above

Prepared by B. Kimbrell, M.D.

Approval:

Surgery Committee: 10/05/07

MEC: 10/09/07

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T4 PROTOCOL

1. Administer IV boluses of the following in a rapid succession:
 - a. 1 amp D50% Dextrose
 - b. 2 Gm Solumedrol
 - c. 20 Units Regular Insulin
 - d. 20 mcg Thyroxin (T-4)
2. Start drip of 200 mcg T-4 in 500 ml NS (0.4mcg/mL)
 - a. T-4 drip rate
 - i. 25 mL/hour (10 mcg/hr) for patients > 100 pounds
 - ii. 19 mL/hour (7 mcg/hr) for patients 75-100 pounds
 - iii. 13 mL/hour (5 mcg/hr) for patients < 75 pounds
 - b. Reduce other pressors as much as possible and then adjust T-4 as necessary to maintain SBP>100 mmHg
3. After 30-60 minutes the donor will usually develop tachycardia, hypertension and fever
4. Monitor serum potassium carefully (Usually decrease and requires aggressive replacement)

POTENTIAL PROBLEMS

1. DIC: If patient has clinical signs of DIC, transfuse immediately with 4-6 Units of FFP. Also normalize pH and body temp.
2. Diabetes Insipidus (DI):
 - a. If normotensive, serum NA >148 and UOP >600 mL/hr, give 1-2 mG DDAVP IV (Q 2-8 hours PRN) and replace 1 mL of ½ NS for every 1 mL of urine output over 200 mL per hour
 - b. If hypotensive start vasopressin at 1-8 units/hour & replace ½ mL of ½ NS for every 1 mL of urine output over 200 mL per hour
3. Tachycardia & Hypertension: Commonly occurs prior to complete herniation. Once herniation occurs, BP will drop precipitously. If treatment is given, be sure it has a very short half-life
4. Neurogenic pulmonary edema: Increase ventilator support and Fio2 as needed
5. Hypokalemia: manage aggressively, consider sliding scale
6. Hyperglycemia: manage with insulin sliding scale or drip
7. Hypothyroid: T4 Donor Protocol (see above)
8. Cardiac arrest: Follow ACS guidelines

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