Donation after Brainstem Death (DBD)

Donor Optimisation Extended Care Bundle

NHS Blood and Transplant

Patient Name

Date of Birth

Unit Number

Date and Time

Priorities to address are

1. Assess fluid status and correct hypovolaemia with fluid boluses
2. Introduce vasopressin infusion where required introduce flow monitoring
3. Perform lung recruitment manoeuvres (e.g. following apnoea tests, disconnections, deterioration in oxygenation or suctioning)
4. Identify, arrest and reverse effects of *diabetes insipidus*
5. Administer methylprednisolone (all donors)

	Y	N/A
Cardiovascular (primary target MAP 60 – 80 mm Hg)		
1. Review intravascular fluid status and correct hypovolaemia with fluid boluses	☐	☐
2. Commence cardiac output / flow monitoring	☐	☐
3. **Commence vasopressin (0.5 – 4 units/hour) where vasopressor required, wean or stop catecholamine pressors as able**	☐	☐
4. Introduce dopamine (preferred inotrope) or dobutamine if required	☐	☐
Respiratory (primary target $PaO_2 \geq 10$ kPa, pH > 7.25)		
1. Perform lung recruitment manoeuvres	☐	☐
2. Review ventilation, ensure lung protective strategy (Tidal volumes 4 – 8ml/kg ideal body weight and optimum PEEP (5 – 10 cm H_2O)	☐	☐
3. Maintain regular chest physio incl. suctioning as per unit protocol	☐	☐
4. Maintain 30 – 45 degrees head of bed elevation	☐	☐
5. Ensure cuff of endotracheal tube is appropriately inflated	☐	☐
6. Patient positioning (side, back, side) as per unit protocol	☐	☐
7. Where available, and in the context of lung donation, perform bronchoscopy, bronchial lavage and - toilet for therapeutic purposes	☐	☐

	Y	N/A
Fluids and metabolic management		
1. Administer methylprednisolone (dose 15 mg/kg, max 1 g)	☐	☐
2. Review fluid administration. IV crystalloid maintenance fluid (or NG water where appropriate) to maintain $Na^+ < 150$ mmol/l	☐	☐
3. Maintain urine output between 0.5 – 2.0 ml/kg/hour (If > 4ml/kg/hr, consider *Diabetes insipidus* and treat promptly with vasopressin and/or DDAVP. Dose of DDAVP 1 – 4 mcg ivi titrated to effect)	☐	☐
4. Start insulin infusion to keep blood sugar at 4 –10 mmol/l (minimum 1 unit/h; add a glucose containing fluid if required to maintain blood sugar)	☐	☐
5. Continue NG feeding (unless SN-OD advises otherwise)	☐	☐
Thrombo-embolic prevention		
1. Ensure anti-embolic stockings are in place (as applicable)	☐	☐
2. Ensure sequential compression devices are in place (as applicable)	☐	☐
3. Continue, or prescribe low molecular weight heparin	☐	☐
Lines, Monitoring and Investigations (if not already done)		
1. Insert arterial line: left side preferable (radial or brachial)	☐	☐
2. Insert CVC: right side preferable (int jugular or subclavian)	☐	☐
3. Continue hourly observations as per critical care policy	☐	☐
4. Maintain normothermia using active warming where required	☐	☐
5. Perform a 12-lead ECG (to exclude Q-waves)	☐	☐
6. Perform CXR (post recruitment procedure where possible)	☐	☐
7. Send Troponin level in all cardiac arrest cases (and follow-up sample where patient in ICU > 24 hours)	☐	☐
8. Where available, perform an Echocardiogram	☐	☐
9. Review and stop all unnecessary medications	☐	☐

Signature _____ **Print Name** _____ **Date** _____ **Time** _____

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Cardiac output / flow monitor used: .....

Physiological Parameters / Goals **Tick ✓ = achieved, x = not achieved**

	O/A	+1hr	+2hrs	+4hrs	+6hrs	+8hrs	+10hrs	+12hrs	+14hrs	+16hrs	+18hrs
$PaO_2 \geq 10.0$ kPa ($FiO_2 < 0.4$ as able)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
$PaCO_2$ 5 – 6.5 kPa (or higher as long as pH > 7.25)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
MAP 60 – 80 mmHg	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
CVP 4 – 10 mmH (secondary goal)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Cardiac index > 2.1 l/min/m^2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
$ScvO_2$ > 60 %	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
SVRI (secondary goal) 1800 – 2400 dynes*sec/cm^5/m^2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Temperature 36 – 37.5°C	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Blood glucose 4.0 – 10.0 mmol/l	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Urine output 0.5 – 2.0 ml/kg/hour	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Signature											
Print name											
Date											
Time											