Swiss Donation Pathway

Evaluation and treatment of adult donors in intensive care units

Module — 3

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CNDO
Nationaler Ausschuss für Organspende
Comité National du don d’organes

swiss transplant

CONTENT

For the sake of readability, the generic masculine form is used. However, all references to persons apply to all genders. Where applicable, the term "organ donation" also includes tissue donation.

1.0 Introduction

1.1 Scope and goals

The recommendations for the evaluation and treatment of adult donors are intended for medical and nursing staff (physicians, nurses, therapists) in intensive care units in Switzerland. The recommendations apply to adult DBD donors (donation after brain death), although the basic aspects also apply to adult DCD donors (donation after cardiocirculatory death).

The information from the medical history, laboratory results, current clinical values, and the results of imaging examinations form the basis for medical decisions regarding organ allocation.

It also ensures that adequate measures are taken to provide the best possible treatment for donors and preserve organs.

1.2 Legal framework

The topic of preparatory measures is dealt with in the transplantation law [1] and in the guidelines of the Swiss Academy of Medical Sciences (SAMS) "Determination of death with regard to organ transplantation and preparation for organ procurement" [2].

Preparatory medical measures are activities that are carried out exclusively for the purpose of possible organ donation and are not undertaken for the treatment of the patient. The measures may only involve minimal risks and stress for the donor and may be necessary both before and after the determination of death.

A distinction is made between **diagnostic measures** (e.g., HLA typing, serological analyses, imaging procedures) and **organ-preserving measures** (e.g., continuation of therapies already begun, such as ventilation, administration of medications and fluids to maintain circulatory function and homeostasis).

It is important to divide the preparatory medical measures into the time **before** and **after** death is confirmed.

1.2.1 Preparatory medical measures before the determination of death

Medical measures carried out before death include the continuation of therapies already begun (continuation of ventilation, administration of medication, hormones, and fluids to maintain circulatory function and homeostasis) and laboratory analyses to monitor treatment. The continuation of therapies that have already been started is not considered a preparatory medical measure as long as they still serve purposes other than organ procurement (e.g., saying goodbye to relatives, palliative care).

Preparatory medical measures are not permitted if they could hasten death or lead to a permanent vegetative state.

Preparatory medical measures may only be carried out with the patient's consent (donor card, living will, etc.). If there is no documented will, the presumed will of the patient must be determined with the help of the relatives. If there is no statement from the patient, the measures already taken may be maintained until the next of kin can be reached. If there are no relatives or they cannot be reached in time, no further preparatory medical measures for organ donation may be taken and organ donation is excluded.

1.2.2 Preparatory medical measures after death has been determined

After the patient's death, preparatory medical measures may be carried out until consent or refusal is obtained from the relatives. After death has been determined, further measures to maintain organ perfusion (mechanical resuscitation, insertion of femoral cannulas for organ perfusion, ECMO insertion) are permitted, as these can no longer harm the deceased.

Preparatory medical measures may be carried out after the patient's death for a maximum of 72 hours [2].

1.3 Resuscitation during donor treatment

DBD: If a brain-dead patient with consent for organ donation suffers cardiac arrest prior to organ procurement, resuscitation measures including defibrillation and chest compressions are strongly recommended.

DCD: Mechanical resuscitation measures are not permitted before death has been confirmed.

The guidelines of the Swiss Academy of Medical Sciences (SAMS) [2] (Section H: Negative List) advise against performing mechanical resuscitation **before** death; the performance of mechanical resuscitation **after** death is left open.

2.0 Monitoring

The following recommendations for monitoring are limited to parameters relevant to donor treatment and organ evaluation.

2.1 Standard monitoring

<table>
<tr><th>Parameter</th><th>Measurement interval</th><th>Comments</th><th>SOAS documentation</th></tr>
<tr><td>Heart rate</td><td>Continuous</td><td></td><td rowspan="8">Record parameters after brain death diagnosis (DBD) or opening of donation file (DCD).

Then update every 4 hours.

For unstable donors, update frequency in SOAS as agreed with Swisstransplant.</td></tr>
<tr><td>Heart rhythm</td><td>Continuous</td><td></td></tr>
<tr><td>Type Pressure measurement (sys / dias / mean)</td><td>Continuous</td><td></td></tr>
<tr><td>Central venous pressure (CVP)</td><td>Continuous if possible, otherwise every 4 hours</td><td></td></tr>
<tr><td>Temperature (central)</td><td>Every 4 hours</td><td></td></tr>
<tr><td>Diuresis</td><td>Every 4 hours</td><td>Hourly in cases of diabetes insipidus</td></tr>
<tr><td>Fluid balance</td><td>Every 4 hours</td><td>Hourly in cases of diabetes insipidus</td></tr>
<tr><td>Ventilation parameters</td><td>Continuous</td><td>See also chapter 4.1</td></tr>
<tr><td>Peripheral oxygen saturation</td><td>Continuous</td><td></td><td></td></tr>
</table>

2.2 Advanced monitoring

Monitoring	Measurement interval	Comments	SOAS documentation
Mixed venous / central venous saturation SO_2 (SvO_2 / $ScvO_2$)	Continuous	In cases of manifest/suspected organ hypoperfusion	Record the parameters after brain death diagnosis (DBD) or opening of the donor file (DCD). Then update every 4 hours. For unstable donors, update frequency in SOAS as agreed with Swisstransplant.
PAC/PiCCO	Continuous	PAC: In cases of manifest/suspected cardiac output impairment with left ventricular ejection fraction < 40% PiCCO: In cases of manifest/suspected distributive shock (SIRS/sepsis)	Record parameters only after consulting Swisstransplant.

3.0
Laboratory tests and imaging diagnostics

3.1 Laboratory tests

Blood group determination	Measurement interval	Comments	SOAS documentation
Blood group (ABO & Rhesus)	Twice (if possible)		Entry + Attachement Laboratory sheet

HLA typing	Measurement interval	Comments	SOAS documentation
HLA typing	Once		Entry + Attachement Laboratory sheet

Serology/Virology	Measurement interval	Comments	SOAS documentation
Serologies: HIV, hepatitis B & C, CMV, syphilis, toxoplasmosis, EBV, HTLV I & II, herpes simplex & herpes zoster	Once		Entry + Attachment Laboratory sheet
PCR: HIV, HBV, HCV	If indicated	In case of positive serology or risk factors, after consultation with Swisstransplant	Entry + Attachment Laboratory sheet
Other	If indicated	For risk factors, consult with infectious disease specialists (see document "Infectious diseases consultations" on the Extranet).	Entry +Attachment Laboratory Sheet

Haematology	Measurement interval	Comments	SOAS documentation
Complete blood count	At least every 24 hours	If Hb is falling, increase frequency accordingly	Entry

Coagulation	Measurement interval	Comments	SOAS documentation
INR, PT, PTT, fibrinogen, factor V	Once (if values are normal)		Entry

Blood gas analysis	Measurement interval	Comments	SOAS Documentation
Arterial blood gas Analysis (ABGA)	Once	At PEEP 5 mbar and FiO_2 0.4 for 10 min	Entry
Arterial blood gas analysis (ABGA)	Every 4 hours if lungs are available	At PEEP 5 mbar and FiO_2 1.0 for 10 min	Entry

Clinical chemistry	Measurement interval	Comments	SOAS documentation
Serum osmolality	Every 24 hours		Entry
Sodium, potassium	Every 4–8 hours	If unstable: every 2–4 hours	Entry
Calcium, magnesium, phosphate,	Once (if values are normal)		Entry
Creatinine and urea	Every 8–12 hours		Entry
Ammonia	Once (if values are normal)		Entry
Direct and total bilirubin	Every 8–12 hours		Entry
Total protein, albumin	Once (if values are normal)		Entry
LDH, CPK, CK-MB, pancreatic amylase, lipase, alkaline phosphatase	Once (if values are normal)		Entry
ASAT, ALAT, GGT	Every 8–12 hours		Entry
CRP	Once (if values are normal)		Entry
Troponin (I or T)	Once (if values are normal)	Every 12 hours during treatment with vasopressin	Entry + Attachment Laboratory sheet
Glucose	Every 4–8 hours	If unstable: every 2–4 hours	Entry
HbA1c	Once		Entry
Lactate	Every 8–12 hours	If unstable: every 2–4 hours	Entry

Urine analysis	Measurement interval	Comments	SOAS documentation
Strip test and sediment	Once		Entry + Attachment Laboratory sheet
Clinical chemistry (Na, K, osmolality, protein, albumin, creatinine)	Once		Entry + Attachment Laboratory sheet

Cultures	Measurement interval	Comments	SOAS documentation
Blood	If indicated		Entry + Attachment Findings
Tracheal secretion	If indicated		
Urine	Once	No older than 48 hours prior to planned kidney removal	
Other (e.g., cerebrospinal fluid)	If indicated	For risk factors, consult with infectious disease specialists (see document "Infectious diseases consultations" on the Extranet).	

3.2 Imaging diagnostics

Procedure	Measurement interval	Comments	SOAS/NEXUS Documentation
CT thorax / abdomen	Once	For lung evaluation: Generally no older than 48 hours (if older: consult with Swisstransplant) For DCD with heart evaluation: additionally with calcium score	Upload donor lung/abdominal/kidney evaluation forms and CT report as attachments (SOAS) Transfer findings to input fields (SOAS) Upload images (NEXUS)
Chest X-ray	Only if CT is not feasible	After consultation with Swisstransplant	Upload donor lung/abdominal/kidney evaluation forms and report as attachments (SOAS) Transfer findings to input fields (SOAS)
Abdominal ultrasound	Only if CT is not feasible	After consultation with Swisstransplant	

			Upload images (NEXUS)
Electrocardiogram (12 channels)	Once	For evaluation of the heart	Upload donor heart evaluation form + ECG as attachment (SOAS) Transfer findings to input fields (SOAS)
Echocardiography (TTE/TEE)	Once	For evaluation of the heart, no earlier than 4 hours after brain death, ideally without vasoactive drugs	Upload donor heart evaluation form + report as attachment to SOAS (SOAS) Transfer findings to input fields (SOAS) Upload image material (NEXUS)
Coronary angiography	If indicated	Depending on age, risk factors, and heart function, after consultation with Swisstransplant	Upload Donor Heart Evaluation Form + report as attachment (SOAS) Transfer findings to input fields (SOAS) Upload images (NEXUS)
Bronchoscopy/BAL	If indicated	After consultation with Swisstransplant	Upload donor lung evaluation form + report as attachment (SOAS) Transfer findings to input fields (SOAS)

4.0
Point-by-point recommendations for donor treatment

4.1 Ventilation

goals

– Adequate oxygenation with lung-protective ventilation

Interventions

– It is essential to ensure adequate airway clearance (tracheal suctioning under sterile conditions). This may have been somewhat neglected in the previous treatment phase due to possible interactions with intracranial pressure (ICP).
– Aspiration prophylaxis, including head elevation of at least 30°, sufficiently high cuff pressure (at least 25 mbar), etc.
– Actively integrate atelectasis prevention into treatment (regular position changes, consider PEEP > 5 mbar) and avoid PEEP losses, especially when repositioning in the operating theatre.
– Use lung-protective ventilation: tidal volume 4.0–7.7 ml/kg or driving pressure ≤ 15 mbar, inspiratory ventilation pressure ≤ 30 mbar, and adequate PEEP of at least 5 mbar.
– In the presence of severe ALI/ARDS or other lung diseases in which lung removal is not an option, the ventilation strategy can be reduced to sufficient oxygenation, e.g., PaO_2 > 9 kPa (≈ 70 mmHg) and SaO_2 > 88% (permissive hypercapnia).
– For patients with high oxygen demand or deoxygenation: perform recruitment maneuvers (increase PEEP) until oxygenation improves. Then gradually reduce PEEP again.

Caution: Ventilated, brain-dead patients may exhibit an autotrigger phenomenon, which simulates spontaneous breathing. In such cases, the inspiratory trigger should be switched off or set to a lower sensitivity.

4.2 Hemodynamics

Goals

Adequate organ perfusion is indicated by the following:
– Warm extremities and good capillary refill time
– Mean arterial blood pressure 60–75 (maximum 90) mmHg
– Urine output 0.5–4.0 ml/kg/h
– Lactate ≤ 2 mmol/l
– Central venous pressure (CVP) 8–12 mmHg
– Mixed venous oxygen saturation (SvO_2) > 65% or central venous oxygen saturation ($ScvO_2$) > 70%

Notes:
- The target values for SvO_2/ $ScvO_2$ were chosen with regard to physiological oxygen extraction as an indicator of adequate organ perfusion.
- Due to the absence of cerebral oxygen extraction, higher values are recommended for $ScvO_2$ than for SvO_2
- SvO_2/ $ScvO_2$ can be measured either intermittently by means of blood samples or continuously via an optical module using a central venous catheter ($ScvO_2$) or pulmonary artery catheter (SvO_2)

Pulmonary artery catheter (PAC**)**
- Cardiac index (CI): ≥ 2.5 $l/min/m^2$
- Pulmonary artery occlusion pressure (PAWP): 10–15 mmHg; in treatment-refractory hypovolemia also > 15 mmHg
- Systemic vascular resistance (SVR):
  No recommendations are made, as this is a calculated value based on measured cardiac output and measured mean arterial blood pressure.

Pulse Contour Cardiac Output (PiCCO; preferably in the case of distributive problems)
- Cardiac index (CI): ≥ 2.5 $l/min/m^2$
- Global end-diastolic volume index (GEDVI): 680–800 (possibly up to 950) ml/m^2
- Pulse pressure variability (PPV): < 10%
- Extravascular lung water index (EVLWI): < 7 ml/kg (in cases of refractory hypovolemia/hypotension: up to 10 ml/kg)

Interventions

Procedure for **inadequate organ perfusion/hypotension**

In transplant medicine, there are different expectations regarding the balance between volume and vasoactive therapies . For heart transplantation, no or minimal doses of vasoactive agents should be used during donor treatment (possibly with more volume), whereas for lung transplantation, the primary focus should be on restrictive volume supply. The therapeutic goal of adequate perfusion of all organs should therefore be achieved with the lowest possible dose of vasoactive agents in order to best meet the conflicting expectations.

In general, the "relax and repair" strategy has proven effective in improving organ function in DBD and DCD donors: most patients have suffered some form of shock as a result of the fatal event that led to organ donation. With a wait-and-see treatment strategy (> 48 hours), the shocked organs achieve a function with adequate treatment that significantly increases the probability of organ allocation and successful transplantation.

1. **Exclusion of obstructive shock**, e.g., tension pneumothorax, pulmonary embolism, pericardial effusion/pericardial tamponade

1. **Hypovolemic shock,** e.g., due to (occult) bleeding, dehydration

   Hypovolemia often occurs in brain-dead patients due to the absence of central stimulation of the vascular system, upregulation of proinflammatory cytokines, and the occurrence of antidiuretic hormone deficiency, and is associated with a significant loss of transplantable organs.

   Crystalloids until normovolemia is achieved (avoid hypervolemia):
   - First choice: Crystalloids (balanced solutions)
   - Avoid colloidal solutions and large amounts of 0.9% NaCl
   - Administer warmed infusions if necessary
   - If there are signs of bleeding/coagulation disorder, consider transfusion (see chapter4.8 -4.10)

   The effect of fluid administration should be monitored to avoid fluid overload. In case of hypervolemia, administer diuretics (furosemide , torasemide; consider thiazide diuretics in case of elevated sodium levels).

2. **Cardiogenic shock**

   Signs:
   - Cold extremities, marbled skin (cutis marmorata)
   - 2D echocardiography: impaired cardiac function (e.g., LVEF < 45%)
   - Increased oxygen extraction: SvO_2< 65% or $ScvO_2$< 70%

   The following cardiac support is recommended here:
   a) Dobutamine ≤ 5 mcg/min/kg
   b) Levosimendan (Simdax®) 0.1 mg/kg/min

   Also consider
   - low-dose hydrocortisone 50 mg every 6 hours (or continuously 200 mg/24 hours)
   - additional volume in cases of proven volume responsiveness

Caution: In cases of Takotsubo cardiomyopathy, serial echocardiograms are indicated for further cardiac evaluation after consultation with Swisstransplant.

3. **Distributive shock** (vasodilation in sepsis, anaphylaxis, or spinal cord injury)

   Signs:
   - Clinical presentation: Warm extremities (cool in sepsis with massive hypovolemia)
   - 2D echocardiography: Preserved cardiac function (possibly diffusely impaired in septic cardiomyopathy)
   - Normal oxygen extraction: SvO_2> 65% or $ScvO_2$> 70% (may be elevated in cases of sepsis with severe hypovolemia)

   The following vasoactive support is recommended here:
   - Step 1: Noradrenaline ≤ 0.5 mcg/kg/min
   - Step 2: Noradrenaline ≤ 1.0 mcg/kg/min
   - Step 3: Noradrenaline ≤ 2–3 mcg/kg/min

Alternatively (especially in cases of **diabetes insipidus**), the following procedure should be considered:

a) Noradrenaline ≤ 0.5 mcg/kg/min
b) Argipressin (Empressin®) 0.01–0.03 IU/min (check ionized calcium, goals > 1.1 mmol/l)

Also consider

- Low-dose steroids: Hydrocortisone 50 mg every 6 hours
- Additional volume
- Dobutamine ≤ 5 mcg/min/kg
- There is little evidence supporting the use of triiodothyronine T3 (e.g., Thyrotardin) for circulatory stabilization. If refractory shock persists after hemodynamic assessment, intravenous administration of T3 may be considered (bolus 4.0 mcg, continuous infusion 3 mcg/h).

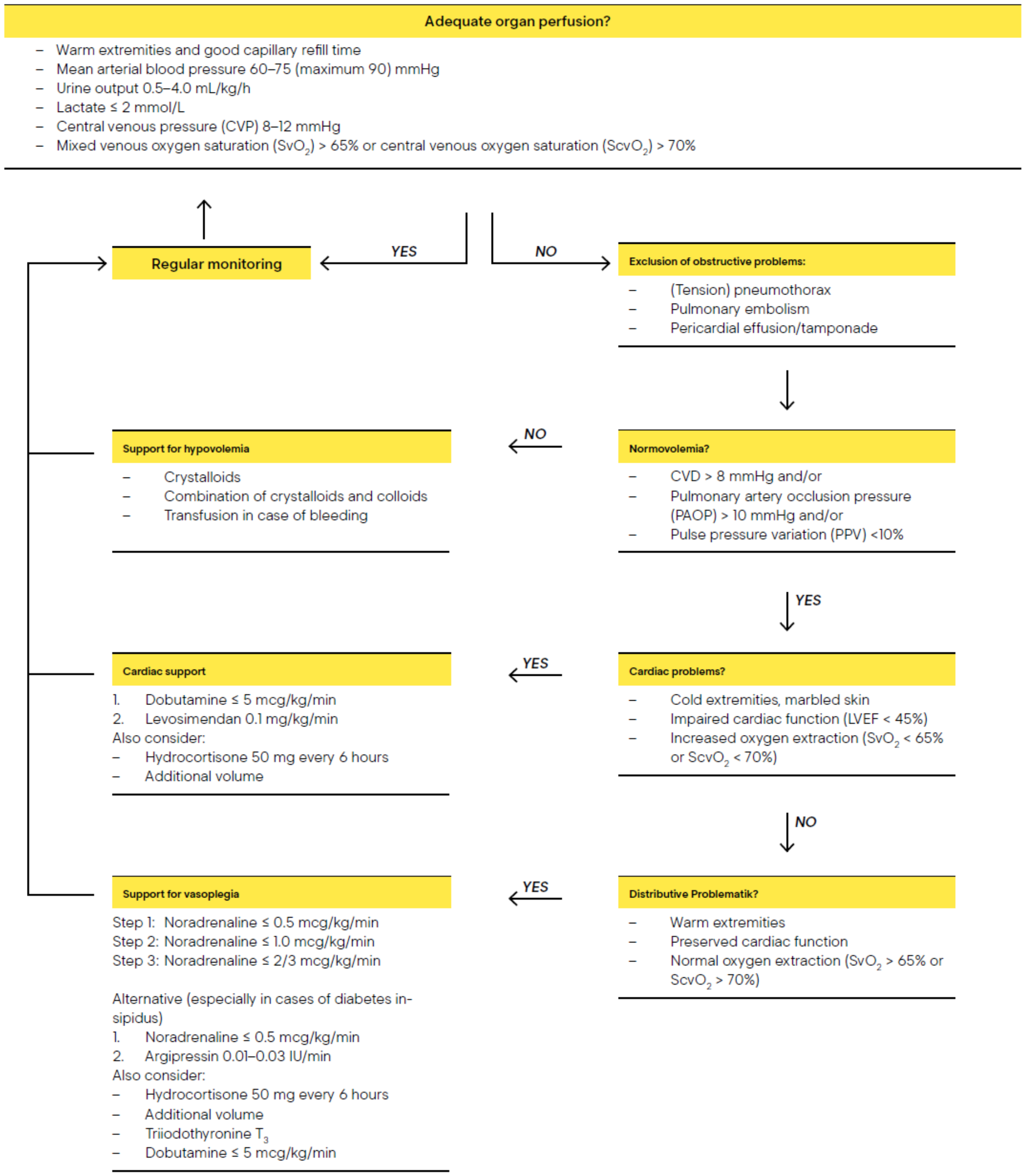

Figure1 : Algorithm for the treatment of inadequate organ perfusion

Procedure for **hypertension**

- Nitroglycerin 0.5–8 mcg/kg/min (if administered in high doses: monitor methemoglobin) or sodium nitroprusside 0.5–5 mcg/kg/min (if administered over a longer period: monitor cyan methemoglobin and/or cyanide levels in whole blood)
- Urapidil (Ebrantil®): Bolus: 10–50 mg IV followed by infusion: 2–15 mg/h
- Clevedipine (Cleviprex®): Infusion: 2–6 (up to 32) mg/h
- If combined with tachycardia and high cardiac output:
  - Esmolol (Breviblock®): Bolus 100–500 mcg/kg/min, followed by infusion: 100–300 mcg/kg/min
  - Or: Labetalol (Trandate®): Bolus: 20–50 mg IV followed by infusion: 0.2–2 mg/min
  - Or: Metoprolol (Beloc Zok®): Bolus: 3–5 mg up to 2–3 mg every 4 hours

Procedure for **arrhythmias**

Bradycardia

- Transjugular or external pacing, if not possible, dobutamine up to 5 mcg/kg/min
- Alternatively, epinephrine or isoprenaline (Isuprel®)

Caution: Atropine is not effective in brain-dead patients for the treatment of bradycardic arrhythmias.

Tachycardia

- Correction of any fluid and electrolyte imbalances (potassium, magnesium), correction of hyperthermia or hypoxemia.
- Amiodarone; in cases of hypertension with high cardiac index, short-acting beta-blockers (e.g., esmolol) may be preferable.
- Possibly electroconversion (if possible, take blood beforehand to determine cardiac enzymes).
- Possibly glucose-insulin-potassium (GIK) therapy: glucose 10% 1 ml/kg/h together with Actrapid®or Novorapid®and potassium at a rate to maintain blood sugar and serum potassium within the target values (see below).

4.3 Body temperature

Goals

- Normothermia

Interventions

Procedure for **hypothermia**

- Warm infusion solutions, warmed breathing gases, thermal blankets, etc.

Procedure for **hyperthermia**

- Check for possible infections (central hyperthermia is rather unusual in brain-dead patients)
- Physical cooling methods (antipyretics are usually insufficient)

Caution: During the determination of death (brain death diagnosis), the core body temperature must be > 35 °C (guidelines of the Swiss Academy of Medical Sciences - SAMS)

4.4 Diabetes insipidus

Diabetes insipidus occurs in up to 80% of all DBD donors and manifests itself as follows:

- Urine output > 4 ml/kg/h
- Serum sodium ≥ 145 mmol/l and rising (**caution**: may rise rapidly)
- Serum osmolarity ≥ 300 mOsmol/l and rising
- Urine osmolarity ≤ 200 mOsmol/l and falling

Goals

- The goal of interventions is primarily based on the patient's fluid status, serum sodium concentration, and osmolarity, and only secondarily on urine output, which should be maintained between 0.5–4 m/kg/h.

Interventions

- Desmopressin (Minirin®) 0.25–2.0 mcg IV every 6 hours
- Alternatively, vasopressin (Empressin®), especially in cases of concomitant hypotension, as a continuous infusion of 0.01–0.03 IU/min

4.5 Sodium

Goals

- 130–150 mmol/l

Interventions

Procedure for **hypernatremia**

- Discontinue infusions containing NaCl; search for other sources of sodium (e.g., colloidal solutions, penicillin antibiotics, etc.) or for reasons for osmotic diuresis (hyperglycemia, elevated serum urea, mannitol therapy, etc.)
- In cases of concomitant diabetes insipidus: desmopressin or vasopressin (see point 4.4)
- In cases of hypovolemia (hypertonic hypovolemia): infusion of glucose 5% or NaCl 0.45% or a mixed infusion of glucose 5% and NaCl 0.9% in a ratio of 1:1 or 2:1
- In cases of hypervolemia (hypertonic hypervolemia): The first choice is natriuretic diuretics (e.g., hydrochlorothiazide), the second choice is natriuretic diuretics in combination with intravenous administration of free fluid (5% glucose).

Procedure for **hyponatremia**

- In cases of hypovolemia (hypotonic hypovolemia): infusion of 0.9% NaCl enriched with an additional 100–200 mmol NaCl (e.g., from a 23.5% NaCl solution) over 4 to 6 hours (if necessary)
- For hypervolemia (hypotonic hypervolemia): fluid restriction, possibly diuretics

Caution:
- Hypernatremia can damage the liver in particular.
- The provision of free water via an enteral tube increases the risk of aspiration and thus endangers the lung.

4.6 Potassium, calcium, magnesium, phosphate

Goals

- The values should be kept within the normal range (if possible, the ionized values should be taken into account).

Interventions

- Correction or substitution of the corresponding electrolytes.

Caution: Calcium should be administered intravenously slowly, as too rapid an injection can lead to hypertension.

4.7 Blood sugar

Goals

- 5–10 mmol/l

Interventions

Procedure for **hyperglycemia**

- Continuously adjusted insulin infusion (e.g., with Actrapid® or Novorapid®)

Procedure for **hypoglycemia**

- Glucose 5–20% depending on fluid status

4.8 Haemoglobin

Goals

- ≥ 70 g/l (≈ hematocrit > 25%)
- For heart removal ≥ 80 g/l

Interventions

- Erythrocyte concentrates (leukocyte-depleted, filtered). Transfusion of blood products, whenever possible only after blood samples have been taken for HLA typing and serological/virological testing.

4.9 Platelets

Goals

- > 200 G/l if there is no bleeding
- > 500 G/l in cases of active bleeding (also check for other coagulation disorders)

Interventions

- Platelet concentrates (pooled, filtered)
- Transfusions of blood products, whenever possible only after taking blood samples for HLA typing and serological/virological testing

4.10 Coagulation

Goals

- INR < 2.0

Interventions

- Coagulation factors, e.g., Prothromplex® or Beriplex®, especially if there is a risk of volume overload
- Fresh frozen plasma (FFP) only in exceptional cases due to the risk of transfusion-related acute lung injury (TRALI)
- Possibly vitamin K (Konakion®)
- Possibly protamine hydrochloride if prior treatment with heparin
- Possibly fibrinolysis inhibitors such as tranexamic acid (Cyclokapron®) or aprotinin (Trasylol®)

4.11 Corticosteroids

High-dose corticosteroids (intravenous methylprednisolone 15 mg/kg) in the event of planned removal of the lungs and/or liver after consultation with the transplant centre.

Low-dose corticosteroids (intravenous hydrocortisone 50 mg every 6 hours = 200 mg/day) are recommended in cases of persistent hypotension and/or reduced cardiac output.

A prior ACTH test (Synacthen®test) is only recommended in exceptional cases. Alternatively, the 200 mg hydrocortisone can also be administered in a continuous infusion over 24 hours.

4.12 Antibiotic therapy

Antibiotics only in cases of confirmed or suspected infection (after taking cultures), no prophylactic antibiotic therapy

4.13 Nutrition

Continue existing enteral or parenteral nutrition, including vitamin and trace element supplementation.

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Changes

Date	Version	Changes
February 2026	5.0	Entire module: New chapter structure and changes/corrections to improve readability Chapters 2.0 and 3.0: Information previously provided in free text in various places has been compiled into tabular overview lists and updated to the latest version Chapter 4.0: Figure 1 (algorithm for the treatment of inadequate organ perfusion) revised in terms of content and visual appearance References: Updated and supplemented
February 2023	4.1	Correction
December 2020	4.0	Revision
March 2018	3.1	New logo
April 2014	3.0	Layout & title adjusted, Text adjusted: Chapters A, B, C; Merger Chapter D & Appendix 1
February 2011	2.0	
December 2006	1.0	Original version

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