

Transport considerations for the transfer of the critically ill child by the Referring Hospital Team

1. Assessment

A decision for transfer to be undertaken by the regional hospital team will be reached following discussion between the referring consultant and the retrieval consultant/ receiving Consultant Intensivist. A joint management plan will be formulated at this time.

Staff most familiar with inter-hospital transfer and competent in airway management should perform the transfer. This will usually be a member of the anaesthetic team from the referring hospital.

2. Initial Stabilisation

In general, initial stabilisation must be undertaken where possible at the regional hospital prior to transfer. However, certain pathology will only respond to definitive intervention at the receiving site. For such cases, time should not be wasted on futile attempts to achieve stability.

In addition to ensuring minimum criteria for safe transfer are met (see below), clear communication must be maintained with the family and the receiving unit at all times.

3. Minimum criteria for safe transport: Paediatric Retrieval

Before transfer, children should be stable, have adequate venous access and appropriate monitoring. Our guidelines on stability and minimum standards are as follows:

Airway

- If Self maintained (GCS >8, unobstructed breathing pattern)
- If Airway adjunct (correct position, patent and secure)
- If intubated (ETT securely fixed and position confirmed on CXR)

Breathing

- Good chest lift and A/E bilaterally
- CXR reviewed (no pneumothorax)
- Ventilation established on transport ventilator
- HME filter in-situ
- Adequate gas exchange confirmed by blood gas analysis

Circulation

- Active bleeding controlled
- HR and BP within normal range for age (where achievable)
- Evidence of adequate perfusion (peripheral pulses palpable, passing urine, lactate clearing)
- Working vascular access lines(IV or IO) x 2
- Vasoactive medications may be administered peripherally if required where central access cannot be obtained (monitor closely for extravasation)
- Age appropriate maintenance fluid

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Disability

- Initial GCS recorded
- Pupillary responses documented
- Adequate sedation and analgesia
- Muscle relaxed (consider intermittent boluses for transfer)
- Seizures controlled (normal glucose?)
- Electrolyte disturbances corrected (where achievable)

- Neuroprotective measures (in the case of significant head injury)
 - Positioned head up 30 degrees (unless spinal precautions in place)
 - PaO₂ 10-15kPa
 - PaCO₂ 4.5-5.0kPa
 - Normothermic
 - Osmotic agent (mannitol or sodium chloride 3%) available for administration

Exposure

- Normothermic (avoid active rewarming following cardiac arrest)
- Document rash or evidence of injury
- Trauma/burns management as per APLS protocols

Monitoring

- Oxygen saturation
- ECG
- Blood Pressure
- End tidal CO₂ (if intubated)
- Pre-departure glucose
- Temperature

Logistics

- Appropriate transport team assembled
- Ambulance secured via National Ambulance Service

Communication

- Transport flow sheet commenced
- Case notes, x-rays, lab results
- Transfer summary letter prepared
- Location of bed confirmed
- Telephone numbers of referring and receiving units available
- Receiving unit advised of departure time and estimated time of arrival
- Relatives informed
- Return travel arrangements in place
- Ambulance crew briefed
- Garda escort arranged if appropriate

(State: 'Time Critical Emergency Patient Transfer'. State if ambulance trolley is required and ensure adequate oxygen is available. Clarify if power will be available)