MANAGEMENT OF MAJOR PEDIATRIC (≤16yrs) TRAUMA

Criteria for Identification of Major Pediatric Trauma Patient

Pediatric Trauma Score (PTS) on arrival or report from BC Ambulance Service

COMPONENT	SCORE		
	+2	+1	-1
Weight	> 20 kg	10 – 20 kg	< 10 kg
Airway	Normal	Oral or nasal airway	Intubated or tracheostomy
Systolic BP	> 90 mm Hg	50 – 90 mm Hg	< 50 mm Hg
Level of Consciousness	Awake	Obtunded or any loss of consciousness	Comatose
Open Wounds	None	Minor	Major or penetrating
Fractures	None	Minor	Open or Multiple
TOTAL SCORE =			

PTS ≤ 8 (indicates significant mortality risk) →

PTS ≥ 9 ↓

PHYSIOLOGIC CRITERIA:
- ✓***Pediatric GCS ≤ 12 or focal neurologic deficit***
- ✓***Airway compromise***
- ✓***Respiratory distress / Cardiovascular compromise***
- ✓***Cardiopulmonary arrest following trauma***

YES →

NO ↓

ANATOMIC CRITERIA:
- ✓***Multiple organ system injury***
- ✓***Uncontrolled hemorrhage***
- ✓***Open chest wound***
- ✓***Any penetrating torso, head, neck or proximal extremity injury***
- ✓***Complete / partial major amputation (exclude digits)***
- ✓***2 or more long bone fractures***
- ✓***Combination trauma and burn***

YES →

NO ↓

FAILS TO MEET MAJOR PEDIATRIC TRAUMA CRITERIA:
(If any concerns, contact BCCH Emergency Physician on duty: 1-604-875-2045)

YES →

MEETS MAJOR PEDIATRIC TRAUMA CRITERIA

Preparing Major Pediatric Trauma Patient for Transport

Call BC Patient Transfer Network (PTN) at
1-866-233-2337 to be connected with
BC CHILDREN'S HOSPITAL as soon as major trauma patient determined (GOAL < 10 min after arrival)

AIRWAY + BREATHING (with C-spine stabilization)

- Compromised
- GCS ≤ 8

NO ↓ / **YES** → **INTUBATE (Rapid Sequence Intubation with *cuffed* ETT)***

CHEST X-RAY

- Confirm ETT placement if applicable
- ? Pneumothorax / hemothorax

NO ↓ / **YES** → **CHEST TUBE**

2 Large Bore IV's or IO (intraosseous) Normal Saline
Urinary Catheter
Oral Gastric Tube *(if intubated)*
Antibiotics For Open Fractures
Tetanus Booster *(if indicated)*
Nursing Report phoned to BCCH ER (1-604-875-2045)

↓

The BC Patient Transfer Network (PTN) will work with sending/ receiving physicians to coordinate all aspects of patient care; including Air Ambulance.

*** See Pediatric Clinical Support Tools at www.childhealthbc.ca**

Tips

Optional Diagnostics should not delay transport to definitive care.

AIRWAY

Intubation: essential if concern about oxygenation, ventilation, obstruction, altered level of consciousness or impending airway compromise.*

BREATHING

Oxygen: GOAL to keep oxygen saturation > 95%

Chest Tube: essential if any evidence of pneumothorax or hemothorax.

CIRCULATION

IV Access: 2 IV sites, may include IO (intraosseous), largest bore possible.

Fluids: Normal saline is fluid of choice for hypotension. Give normal saline bolus (20 ml/kg body weight)*.
Inotropes rarely used in pediatric trauma resuscitation.
Blood products/fluid resuscitation as per Clinical Support Tool.*

Pelvic Splinting: If hemodynamically unstable with suspected pelvic fracture, wrap pelvis tightly with sheet.

OTHER

X-rays: Chest X-ray MANDATORY.
C-spine + pelvis plain films generally indicated but should not delay transport.
CT should NOT delay transport of unstable patient.

NOTE: All major trauma with decreased LOC or intubated will remain in or be placed in full C-spine immobilization on a padded clamshell for transport regardless of C-spine X-ray. Final C-spine clearance for patient with decreased LOC will be done at the receiving facility

Documents: Send imaging (push to grid or CD), photocopies of prehospital record, hospital chart and lab results with patient. Do not send packaged blood with patient unless transfusing enroute. Have radiology department "electronically push" all imaging to "BC Transfer Grid" - or create a CD if grid unavailable.
(Technical questions:**1-604-875-2132**).

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