

### Nursing Care

- Patient Position- head neutral, HOB 30° (if intubated)
- Seizure precautions
- **NPO** until emergent diagnostic studies complete
- Neuro checks Q1 hour x 24 hours then Q4

### Medications/Fluids

- If age  $\geq 6$  mos: Normal saline
- If age  $< 6$  mos: D5NS
- If Intubated: run IVF at 3/4x maintenance
- If spontaneously breathing: run IVF at 1x maintenance
- Acetaminophen 15 mg/kg q 4 hrs PRN temp  $> 37.5^{\circ}\text{C}$
- Ranitidine 1 mg/kg/dose q 8 hrs

### Seizure Prophylaxis:

- Levetiracetam 40 mg/kg load once
- Levetiracetam 60mg/kg/day divided BID
- Ativan 0.1 mg/kg/dose (max 4mg) PRN seizure  $> 5$  minutes

### If Cerebral edema present:

- 3% NS bolus 5ml/kg (max 250 ml) then continuous infusion 1ml/kg/hr, titrate for serum Na 150-160 or osmolality  $< 360$  via central line
- Mannitol 0.5 g/kg (see hyperosmolar algorithm for details)

### Imaging Studies

See Page 2

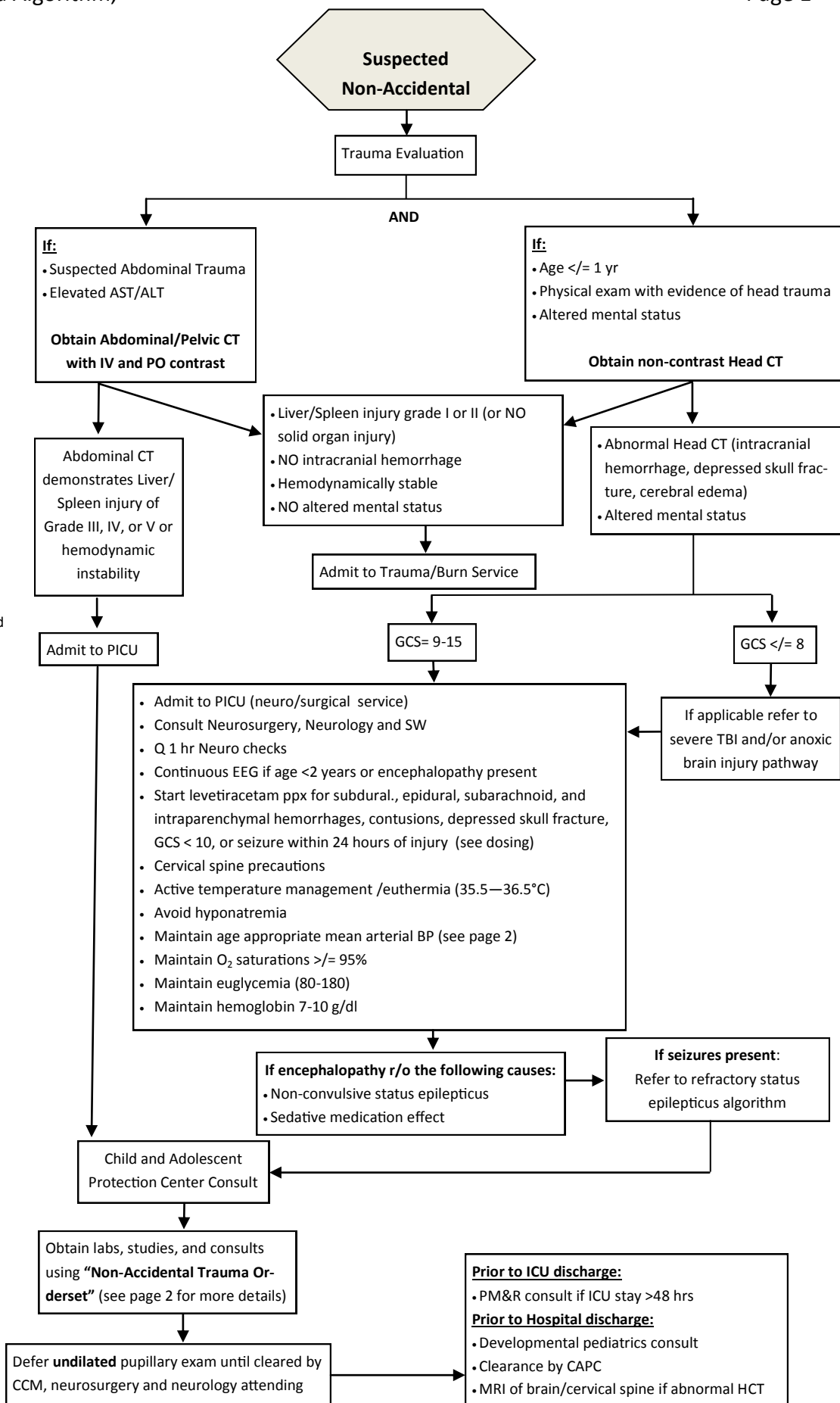
### Disposition

#### Accepting Service

- Trauma if ongoing surgical issues or  $< 24$  hrs post-op
- Neurosurgery if intervention
- Hospitalist if  $> 24$  hrs of admission and no active surgical issues

#### Criteria for ICU to Floor Transfer

- No seizures x 24 hrs
- Stable appearance of intracranial hemorrhage on head CT
- Resolution of encephalopathy if repeat CT not indicated
- Solid organ injury patients with stable hgb/hct for  $\geq 24$  hrs



Admission Labs (if not already done in ER)	
CBC	AST
Amylase	ALT
Lipase	Urinalysis
BMP	Urine Drug Screen, A and B

If Fractures are Present	
Calcium level	Intact Parathyroid Hormone level
Phosphorus level	Alkaline Phosphatase
25- Hydroxy Vit D level	Col1A1 and Col1A2 genomic seq for OI (if >1 fracture)

Concern for Metabolic Disorder:	
Plasma amino acids	Free and total carnitine
Urine organic acids	Acetylcarnitine Profile
Lactate pyruvate battery	Ammonia

If Head Trauma (draw prior to transfusions)	
PT/PTT	Factor XIII screen
Thrombin Time Assay	Platelet Function Screen <sup>1</sup>
Fibrinogen	Factor VIII assay <sup>2</sup>
Von Willebrand's Antigen	Factor IX assay <sup>2</sup>
Von Willebrand's Factor (Ristocetin Factor)	

<sup>1</sup> If platelets >100K and <500K AND Hct >= 30% or Hgb >= 10 gm/dl

<sup>2</sup> If Male

If Illicit Drug Ingestion Suspected or Altered Mental Status
Send GCMS toxicology serum lab

If Cutaneous Injury (Bruising)
PT/PTT
Platelet Function Screen <sup>1</sup>

<sup>1</sup> If platelets >100K and <500K AND Hct >= 30% or Hgb >= 10 gm/dl

Imaging Studies
If age <= 2 years: Skeletal Survey
If age <= 1 year or possible head trauma or altered mental status: Head CT without contrast
If abnormalities seen on Head CT: MRI of brain without contrast and cervical spine w/ and w/o contrast
If Suspected abdominal trauma or AST and ALT >= 80 units/L: Abdominal/Pelvic CT with IV and PO contrast

Mean Arterial Blood Pressure Goals					
Age	1-2 yrs	3-4 yrs	5-6 yrs	7-8 yrs	9-10 yrs
MAP	>55 mmHg	>63 mmHg	>68 mmHg	> 70 mmHg	>75 mmHg