

Blunt Abdominal Trauma EBG Algorithm Lois Lee, MD & Alexis Schmid, RN © Emergency Department, Boston Children's Hospital May 28, 2014

Child with blunt abdominal trauma

Inclusion Criteria:

- · Blunt abdominal trauma presenting within 24 hours
- Age ≤ 21 years

reasons to return

• GCS 14-15 **RN Assessment Exclusion Criteria:** Targeted history and examination • Significant comorbidities (e.g. Vital signs q2h neurologic, coagulopathy) Neuro check with pupil exam · Concern for non-accidental trauma Request immediate MD evaluation if clinical concern or significant status change Hypotensive • GCS < 14 · Multi-system trauma including femur fracture **MD** Assessment · Altered mental status (from History and examination intoxication, head trauma) Appropriate trauma activation (stat, alert, or consult) - if not already called [†]Abdominal Wall Trauma Definitions Urine/serum hcg and type & screen in all post-pubertal females Abdominal wall trauma: abrasion, erythema, ecchyomosis, on abdomen Seat belt sign: abrasion, erythema, ecchyomosis, on abdomen in distribution of lap belt *Trauma Labs in ED Trauma Orderset Does the patient have: · CBC for all patients • Evidence of abdominal wall • May consider LFTs, lipase, UA, type & screen trauma/seat belt sign† depending on clinical concerns OR ≥2 of the following predictors: No Any abdominal tenderness · Evidence of thoracic wall trauma · Complaints of abdominal pain · Absent or decreased breath sounds Vomiting No labs/imaging Observation o For 4 hours if 1 predictor FAST exam if credentialed provider available Abdominal CT with IV Worse Symptoms? Re-consult Trauma Team contrast Consider labs with IV placement* Νo Reevaluate including: Does the CT have PO challenge Observe 4 hrs after abnormal traumatic Repeat VS CT Repeat abdominal/thoracic exam findings? Yes Discharge home Admit to Trauma Abdominal trauma Surgery service Symptoms improved? Re-consult Trauma Team ·Yes • Labs per Trauma instructions with (without narcotics)

EBG developed from Holmes JF, et al. Identifying Children at Very Low Risk of Clinically Important Blunt Abdominal Injuries. Annals of Emergency Medicine. Vol. 62: 107-116. Primary outcome was intra-abdominal injury undergoing acute intervention, defined as: 1) death; 2) therapeutic intervention at laparotomy; 3) angiographic embolization; 4) blood transfusion for anemia; or 5) IVF for ≥2 nights in pancreatic/gastrointestinal injuries.

Team protocol