Non-accidental Trauma - Abdominal Manifestations

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History
Hemodynamically unstable toddler with holohemispheric left supratentorial subdural hematoma.

Diagnosis
Non-accidental Trauma-Abdominal Manifestations

Discussion
Injury patterns are often key in recognizing non-accidental trauma (NAT). Skeletal, intracranial and orbital injuries are common and have been well described. Visceral injuries are less common and often overlooked, but they can be life threatening. The mortality of abusive abdominal injuries is twice as high as accidental abdominal injuries. Any solid organ can be injured in the setting of NAT. Liver, small bowel, spleen and pancreas are the most commonly injured. Typical injuries include lacerations, contusions and hematomas. Liver and splenic injuries are noted with equal frequency in accidental and non-accidental trauma. On the other hand, duodenal injuries have not been reported in children less than 4 years old with accidental trauma. Therefore, duodenal injuries, including mural hematoma, perforation and transection, in a child less than 4 years of age strongly indicates NAT. Pancreatic injuries can lead to pancreatitis and subsequent pseudocyst formation. Renal injuries do not appear as often. The increased incidence of pancreatic and duodenal trauma means visceral compression against the spine is a common etiology.

Findings
CT-Axial and coronal images of the abdomen show laceration of the caudate lobe, periportal edema, mural hematoma of the distal duodenum, and hemoperitoneum.

Reference

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