Hand Exam
- Inspect for edema, ecchymoses, open wounds, abrasions
- Palpate for point tenderness, radial & ulnar pulses
- Test FDP, FDS, and extensor tendon function
- Test radial (hitchhike, posterior thumb web), median (OK sign, index fingertip), and ulnar nerve (abduction, pinky fingertip) motor and sensory function
- Attempt to test range of motion
- Check distal neurovascular status: 2-point discrimination (5-6mm), capillary refill, color
- Check for anatomic snuffbox tenderness, axial loading, handshake test
- Check normal closed-fist finger alignment

Non-GI Causes of Pediatric Abdominal Pain
- Lower lobe pneumonia
- Asthma
- Strep pharyngitis
- Sickle cell crisis
- Toxic ingestion
- Viral (e.g. infectious mononucleosis)
- Leukemia
- Envenomations
- Testicular torsion, hernia
- PID, ovarian torsion, ectopic pregnancy, Mittelschmerz, imperforate hymen
- UTI, renal stone
- Constipation
- Henoch-Schönlein Purpura
- Zoster (before rash)

Breath-holding spells and anemia references


Pediatric Spleen Trauma
- Mechanism: vehicle-related m/c, but can occur from falls, sports-related trauma
- Careful examination and close follow-up of children with suspected abdominal trauma
Fever may occur due to reabsorption of hematoma; hematuria is a marker for abdominal injury
CT scan with contrast
Management conservative, admit, serial Hgb, surgeon, transfusion only if unstable or Hgb < 7.0
True delayed rupture of the spleen rare, but occurs

**Headaches in Adolescents**
- Migraines
  - Classic aura (20%), unilateral, throbbing
  - Often assoc N/V
  - Children as young as preschool, 5-10% school age children
  - More often bilateral in kids
  - FH for migraines, HA
  - Pain often relieved by sleep
- Cluster
  - Late adolescent, M>F
  - Sudden onset, unilateral, temple or periorbital, periodic
  - May be assoc with Horner’s syndrome
- Tension
  - Bandlike occipital, frontal, dull
  - Recent stressor
- Signs of brain tumor
  - Onset of headaches < 6 months ago
  - Awakens patient at night
  - Associated with vomiting, especially early AM
  - Progressive (increasing severity, frequency, duration)
  - Clumsiness, ataxia, blurred vision
  - Behavioral changes
  - Polydipsia, polyuria (craniopharyngioma)
- Other causes of headaches
  - Fever
  - Caffeine withdrawal
  - Eye strain
  - Tight hair braids
  - Strep pharyngitis
  - Sinusitis
  - Dental pain / abscess
  - Hypertension
  - Hypoxia (CO poisoning)
  - Meningitis or encephalitis
  - Pseudotumor cerebri
  - Intracranial hemorrhage
  - Cavernous venous thrombosis
ED work-up for headache
- Detailed history of headache onset, characteristics, associated symptoms
- Thorough physical exam including head and neck exam, complete neurologic exam, fundoscopic, BP, visual acuity
- Brain imaging if concern for mass lesion or intracranial hemorrhage
- LP if concern for SAH, CNS infection, pseudotumor cerebri
- Urine pregnancy test in child-bearing age female

**Atypical Kawasaki Disease**
Fever 5 days+ and 2-3 classic KD symptoms OR < 6 months old and fever 7 days+
Classic symptoms
- Erythema of palms/soles, edema of hands/feet, peeling at 2-3 weeks
- Rash: variable (morbilliform, scarlatiniform, E. multiforme-like)
- Conjunctivitis: nonpurulent, bulbar
- Cracked lips, erythema, strawberry tongue
- Cervical node: unilateral, > 1.5cm

Risk stratify with lab criteria: order CRP, ESR, CBC, UA, Albumin, ALT

Primary Criteria
- CRP > 3
- ESR > 40

Secondary Criteria
- Albumin < 3
- Anemic for age
- ALT elevated
- Platelet count > 450 after 7 days of fever
- WBC > 15
- UA WBC > 10

Primary + ≥ 3 secondary criteria: echocardiogram and treatment (ID consult, IVIG, ASA)
Primary + < 3 secondary criteria: echocardiogram, if positive -> treatment
If negative, follow for fever resolution. If doesn’t resolve, repeat Echo
Doesn’t meet primary: daily follow-up and reevaluation for KD symptoms
If develops additional symptoms, echocardiogram
If fever resolves but later peeling, echocardiogram