APPENDICITIS IN THE YOUNG CHILD
When time counts the most
Patient Profile

- The patient
  - 3 years old 2 months girl

- Usually is
  - vibrant, articulate, incorrigible
  - enjoys telling me how to do my job

- She has been sick for 53 hours with gastro sx
  - Today is Monday

- She is lying in her dad’s lap not speaking

5/3/2011
Background Information

- History
- Chief Complaint
  - “She says her tummy hurts”
- History of Present Illness
  - Vomiting started at 3am Saturday morning
  - Mom hydrated with Gatorade
  - Poor Food intake
Background Information

- **Past Medical History**
  - Product of a 33 week pregnancy
  - Birth wt 3 lbs and 14 oz
  - Regained average weight by 9 months

- **Family History**
  - Father has severe allergies

- **Social History**
  - She is
    - in MDO 3 d/w
    - Parents are both educators
    - GM cares for her during the day

- **Has had issues with health care provider anxiety**
## Physical Exam

<table>
<thead>
<tr>
<th>Vital Signs: Temp 99.0 Ax Recheck 101.4 ax , HR 109 , RR 18 , B/P 98/60</th>
<th>Wt: 29 inches Ht: 36 pounds BMI: 15.73</th>
</tr>
</thead>
<tbody>
<tr>
<td>General: weak and pale complexion</td>
<td>Heart: S₁S₂ no murmurs</td>
</tr>
<tr>
<td>Skin: Hot and dry</td>
<td>Abdomen: firm, tender, bowel sounds mildly hyperactive, no hepatosplenomegaly.</td>
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<td>HEENT: nasal congestion with clear mucous, injected pharynx, TM’s are clear</td>
<td>Genitalia: deferred</td>
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<tr>
<td>Neck: Supple, no lymphadenopathy or masses. No JVD</td>
<td>Extremities: Cool, pale, with palpable peripheral pulses. Capillary refill is 6 seconds</td>
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<tr>
<td>Chest: Lung fields CTA, no retractions</td>
<td>Neuro: Intact, WNL</td>
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5/3/2011
Discussion of Findings-WGA

- Vomiting and loose stools
- Abdominal Pain in a Young Child
- New onset fever
- Mild dehydration
- Nasal congestion and mild pharyngitis
Diagnostic Tests

- Red Pharynx
  - Strep Pharyngitis
  - Influenza type a and b

- Clear Nasal Congestion
## Appendicitis Score

Lintula, Kokki, Kettunen, and Eskelinen (2008)

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<th>Criterion</th>
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<tr>
<td>Gender</td>
<td>Male (2 points)</td>
<td>Female (0 points)</td>
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<td>Intensity of pain</td>
<td>severe (2 points)</td>
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<td>Relocation of pain</td>
<td>Yes (4 points)</td>
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<td>Yes (4 points)</td>
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<td>Vomiting</td>
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<td>Body Temp</td>
<td>≥ 37.5°C (3 points)</td>
<td>&lt; 37.5°C (0 points)</td>
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<td>Guarding</td>
<td>Yes (4 points)</td>
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<td>Bowel Sounds</td>
<td>Absent, tinkling, or high-pitched (4 points)</td>
<td>Normal (0 points)</td>
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<td>Rebound Tenderness</td>
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$\geq 21$ points corresponded with high probability for acute appendicitis

$\leq 15$ points the probability of acute appendicitis is low

Total 24
Differential Diagnosis

- Appendicitis with perforation
- Sepsis
- Gastroenteritis
- Mesenteric adenitis
- Constipation
- Urinary Tract Infection
- Intussusception
- Ovarian cyst or torsion
- Malrotation of bowel
Tests (the next step)

- Complete Blood Count
  - Elevated white count > 20,000

- CAT scan versus US
  - US-Inconclusive
  - CAT with contrast-Positive for enlarged appendix
System analysis

- Primary care-Rural site
- Timeliness for Lab and diagnostic studies
- Need to have Surgery available
Question 1

- What absent symptom would give a greater chance of ruling out Intussusception?
Question 2

What considerations should be taken next time this child is sick, especially with any stomach issues?
References