Puking Kids – The Surgical Perspective

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Disclosures

- None
Learning Objectives

- Identify the causes of vomiting that are most likely to require operations in infants and young children.
- Review the essential elements of history and physical exam to determine if a vomiting child might need an operation.
- Learn the hallmarks of abdominal surgical emergencies.
- Appreciate the value of different imaging modalities for diagnosing anatomic causes of vomiting.
What is bilious vomiting?
What is bilious vomiting?
What is bilious vomiting?

<table>
<thead>
<tr>
<th>Group</th>
<th>Green (%)</th>
<th>Yellow (%)</th>
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</thead>
<tbody>
<tr>
<td>Parents</td>
<td>12 (29)</td>
<td>29 (71)</td>
</tr>
<tr>
<td>General practitioners</td>
<td>24 (51)</td>
<td>23 (49)</td>
</tr>
<tr>
<td>SCBU nurses</td>
<td>22 (76)</td>
<td>7 (24)</td>
</tr>
<tr>
<td>Postnatal midwives</td>
<td>33 (69)</td>
<td>15 (31)</td>
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What determines emesis color?
What determines emesis color?
Why does it matter?

- Bilious = obstructive = frequently surgical
  – How frequently?

- Non-bilious = non-obstructive
  (except above the papilla) = rarely surgical

The vomiting part is important

- Sensitivity of bile in the stomach goes way down if you’re sucking it out of a tube.
33 Week Preemie Boy with Bilious Emesis on DOL 7

- Vital signs normal
- Abdomen not distended
- Mild tenderness on exam
What next?

- Surgical consult
- Imaging
Plain films

- Always a good place to start your imaging.
- Quick, easy, available, not operator dependent.
A KUB is NOT ENOUGH

- KUB: supine view only
- Abdominal series:
  - Under 5: Supine and left lateral decubitus (left side down)
  - 5 or older: Supine and upright
33 week preemie with bilious vomiting: Abdominal series
What next?

Text JEXCUZ to 608-260-7097
In the OR
Not all bilious vomiting is rapidly fatal (but take nothing for granted)

Term baby with Trisomy 21 and bilious vomiting at birth
14 day-old girl with vomiting that became bilious during ER visit

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Older kids

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SBO or Ileus?

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13 yo F with vomiting, h/o VP Shunt

Supine view

Upright view

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5 mo M with vomiting, RLQ mass
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What about small bowel – small bowel intussusception?
26 day old boy with frequent forceful emesis
23 day old girl with frequent forceful emesis
Not all vomiting originates in the abdomen
Not all vomiting originates in the abdomen
Not all vomiting originates in the abdomen

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4 days later

6 days later