

A decorative graphic on the left side of the slide consists of several overlapping circles in various colors: purple, light blue, brown, blue, green, red, yellow, and olive green. Two circular inset photos are also present: one at the top right showing a young girl with a red shirt, and one in the center showing a child with arms raised in a wooded area.

Puking Kids – The Surgical Perspective

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Disclosures

- None

Text **JEXCUZ** to 608-260-7097

Learning Objectives

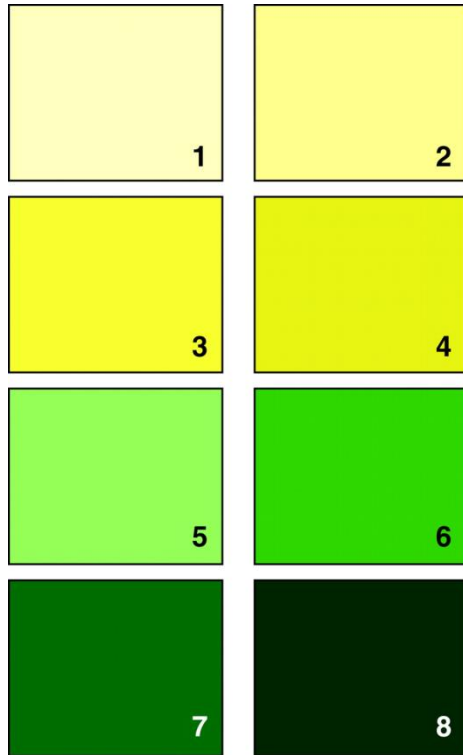
- Identify the causes of vomiting that are most likely to require operations in infants and young children.
- Review the essential elements of history and physical exam to determine if a vomiting child might need an operation.
- Learn the hallmarks of abdominal surgical emergencies.
- Appreciate the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

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What is bilious vomiting?

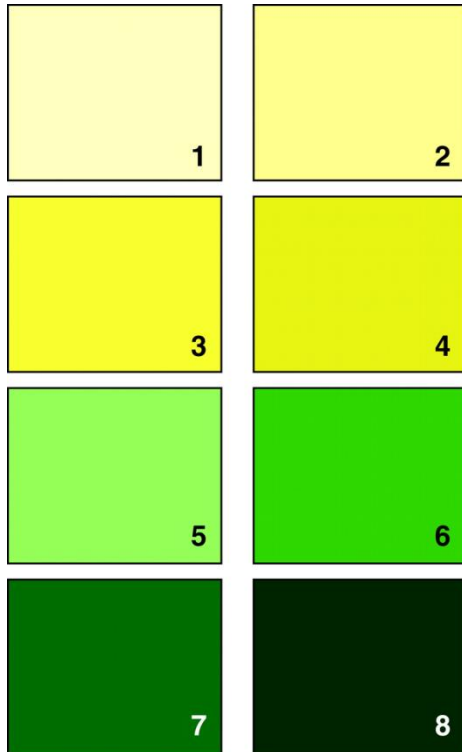
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What is bilious vomiting?



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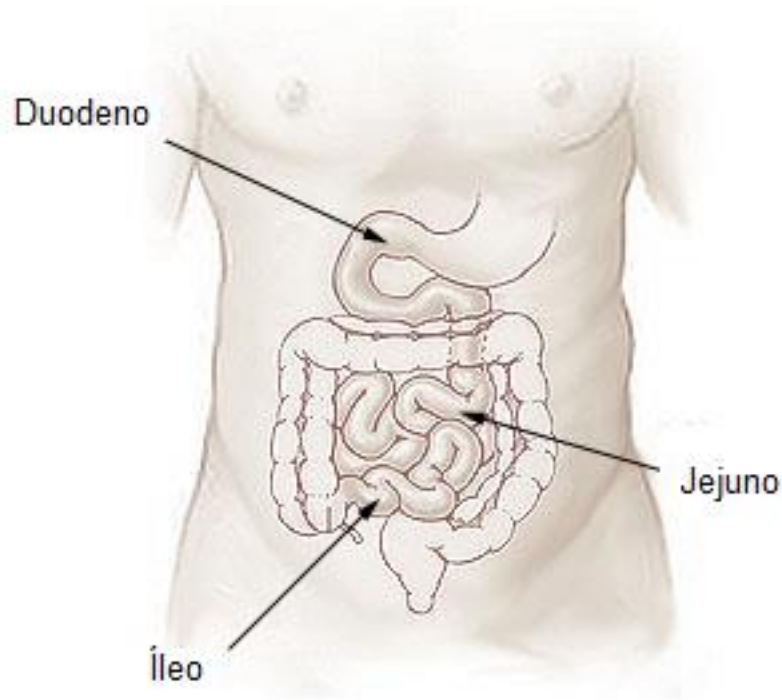
What is bilious vomiting?



Group	Green (%)	Yellow (%)
Parents	12 (29)	29 (71)
General practitioners	24 (51)	23 (49)
SCBU nurses	22 (76)	7 (24)
Postnatal midwives	33 (69)	15 (31)

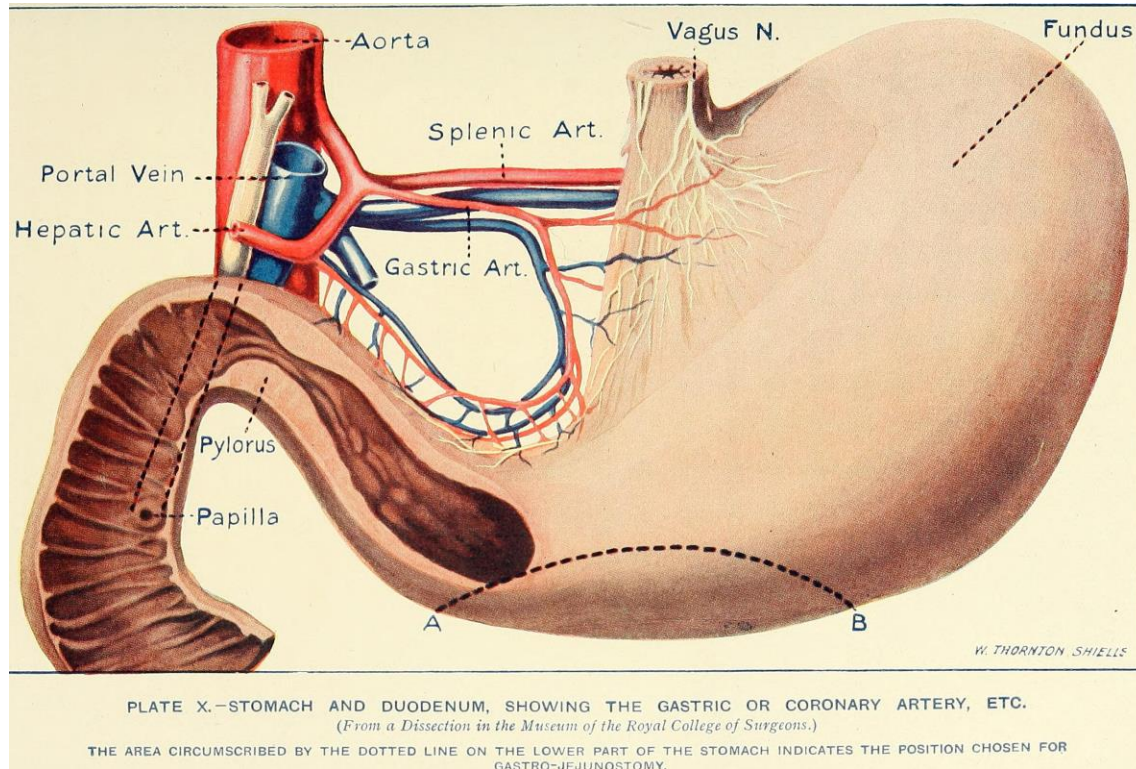
[BMJ](#). 2006 Jun 10; 332(7554): 1363.

What determines emesis color?



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What determines emesis color?



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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

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What next?

- Surgical consult
- Imaging

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Plain films

- Always a good place to start your imaging.
- Quick, easy, available, not operator dependent.

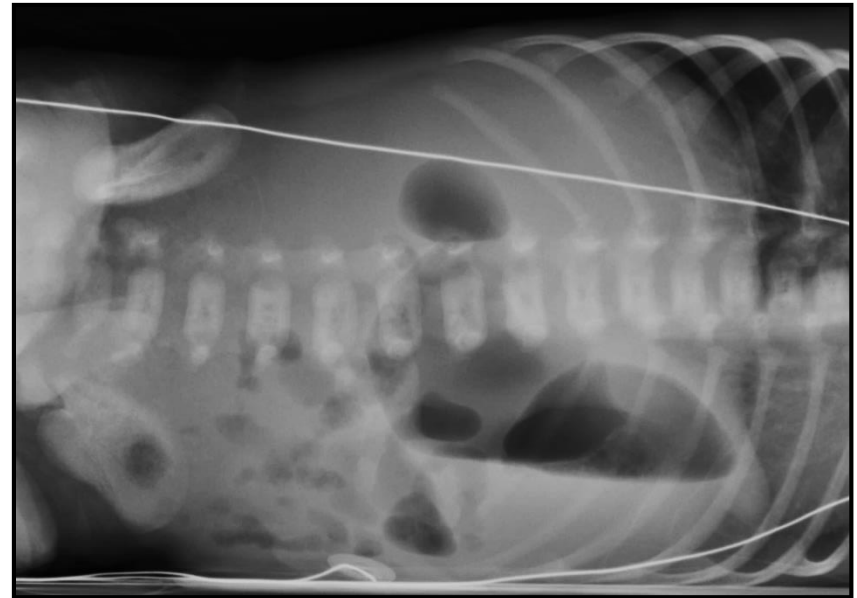
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A KUB is NOT ENOUGH

- KUB: supine view only
- Abdominal series:
 - Under 5: Supine and left lateral decubitus (left side down)
 - 5 or older: Supine and upright

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33 week preemie with bilious vomiting: Abdominal series



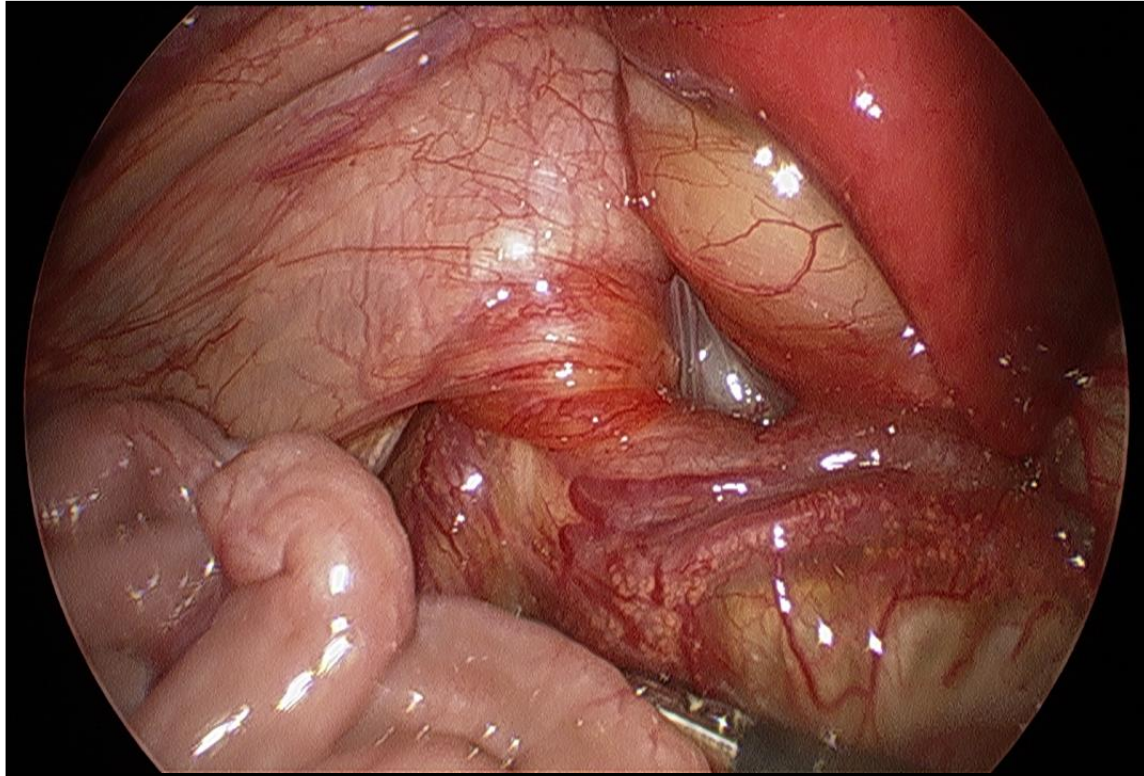
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What next?

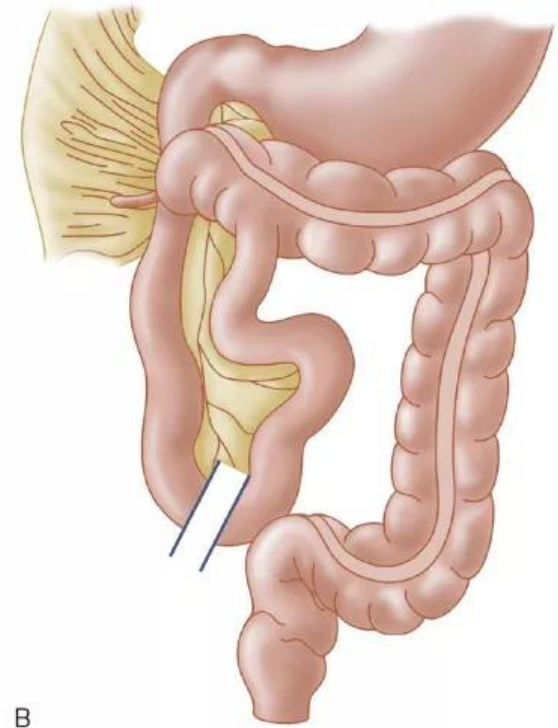
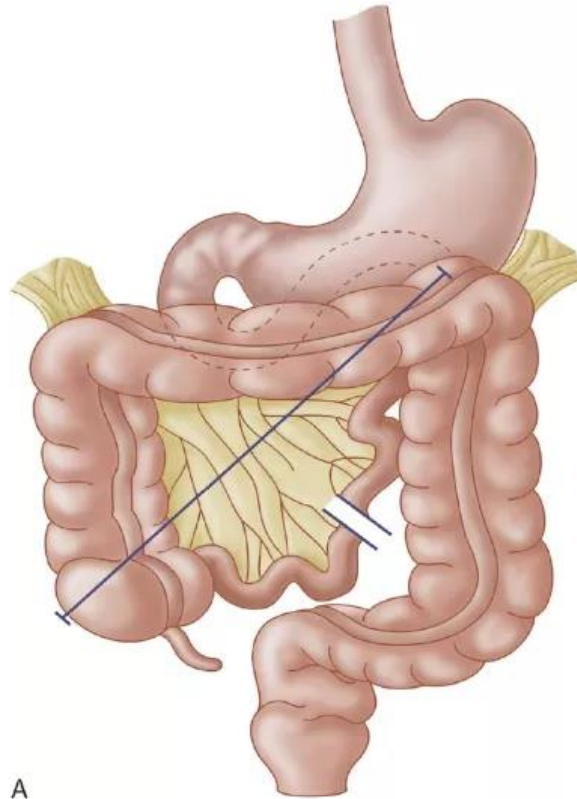


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In the OR



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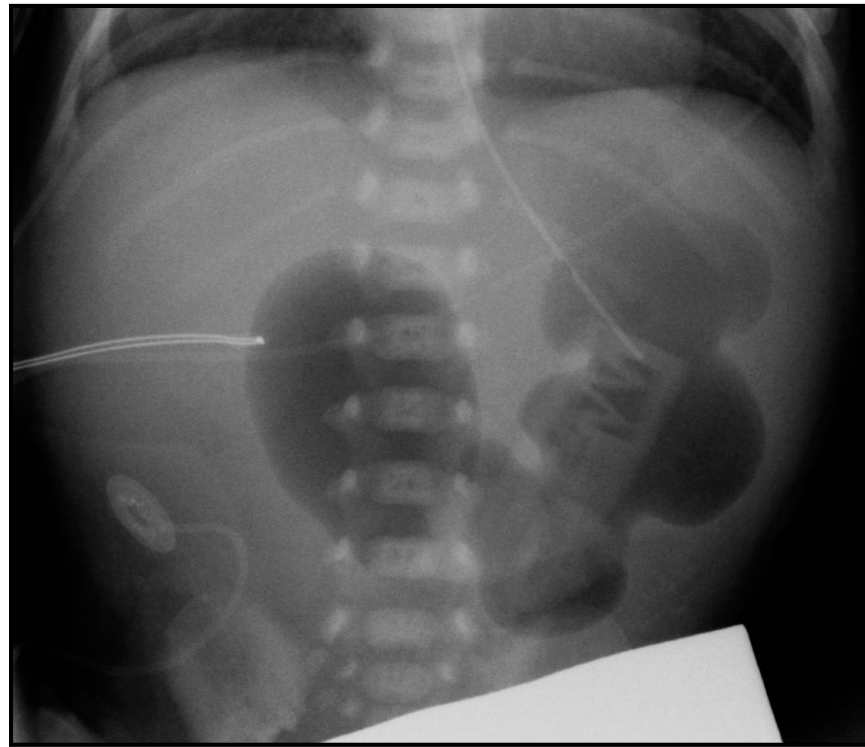
A

B

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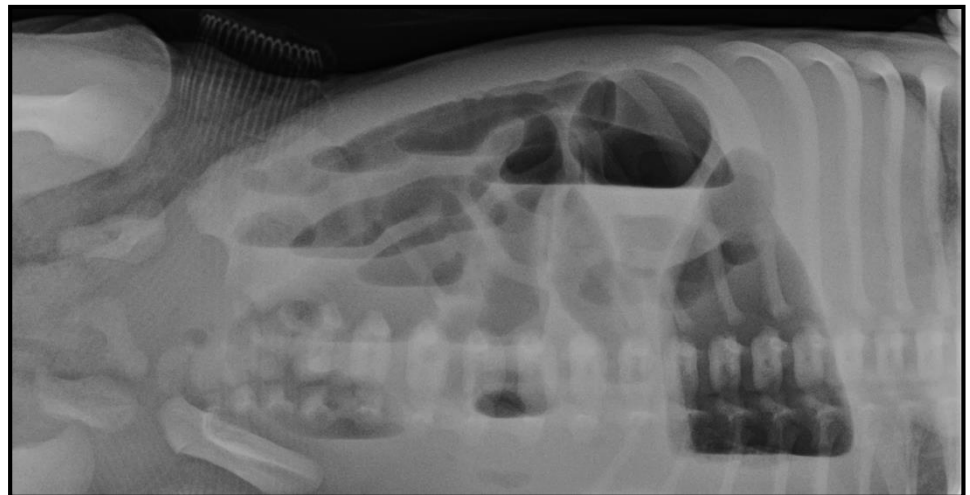
Not all bilious vomiting is rapidly fatal (but take nothing for granted)

Term baby with Trisomy 21 and bilious vomiting at birth



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14 day-old girl with vomiting that became bilious during ER visit



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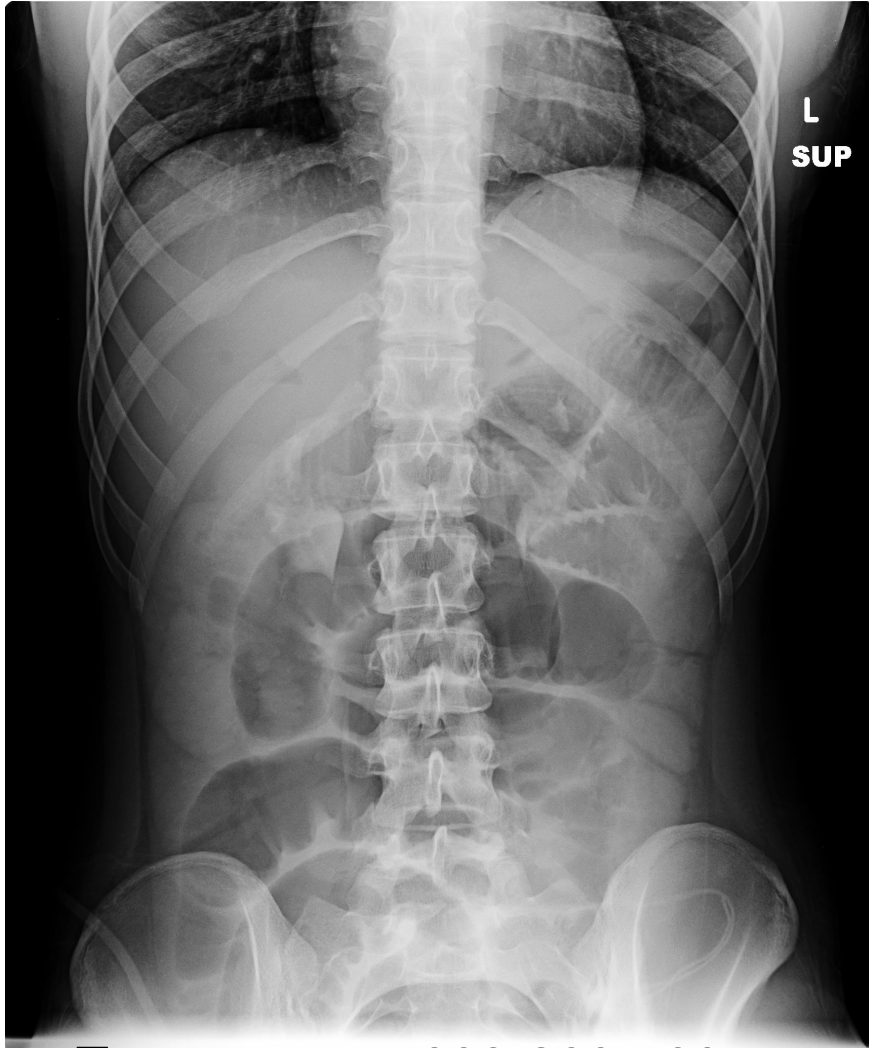


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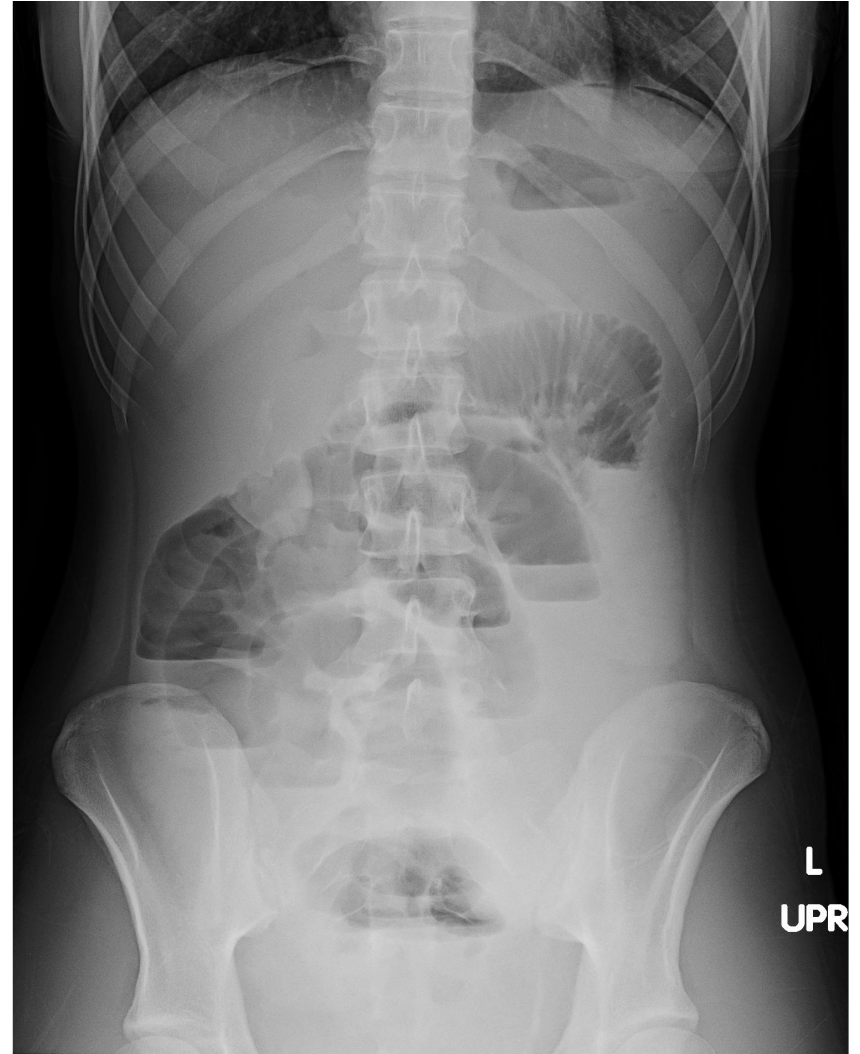
Older kids

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SBO or Ileus?



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13 yo F with vomiting, h/o VP Shunt

Supine view

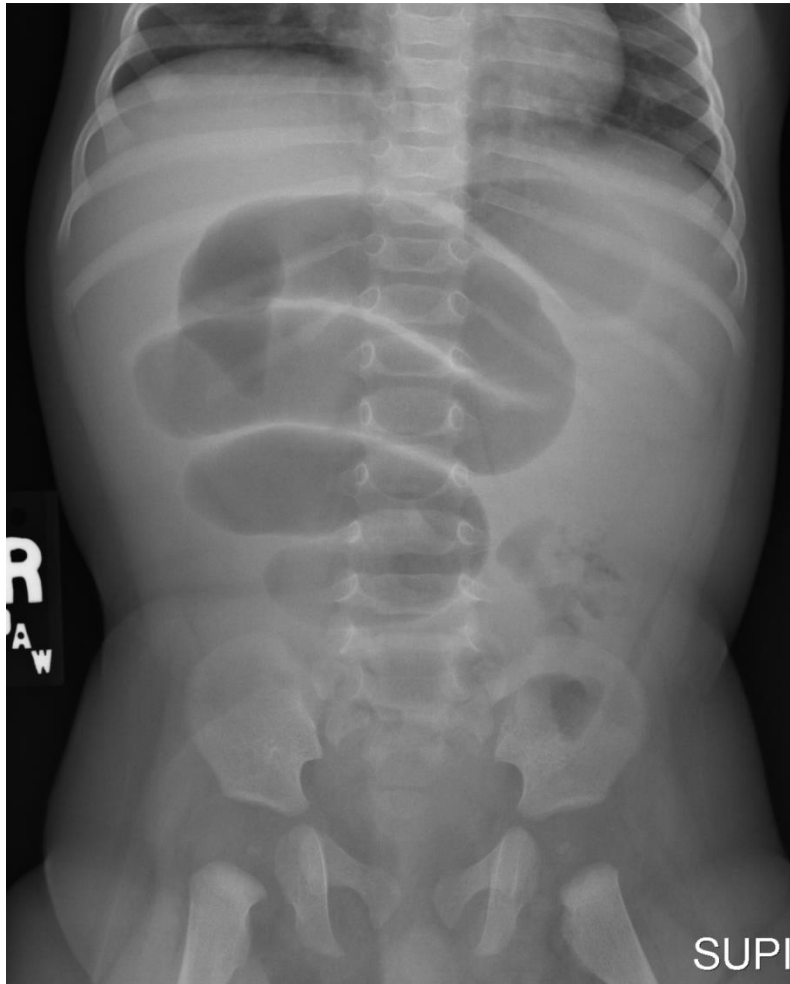


Upright view

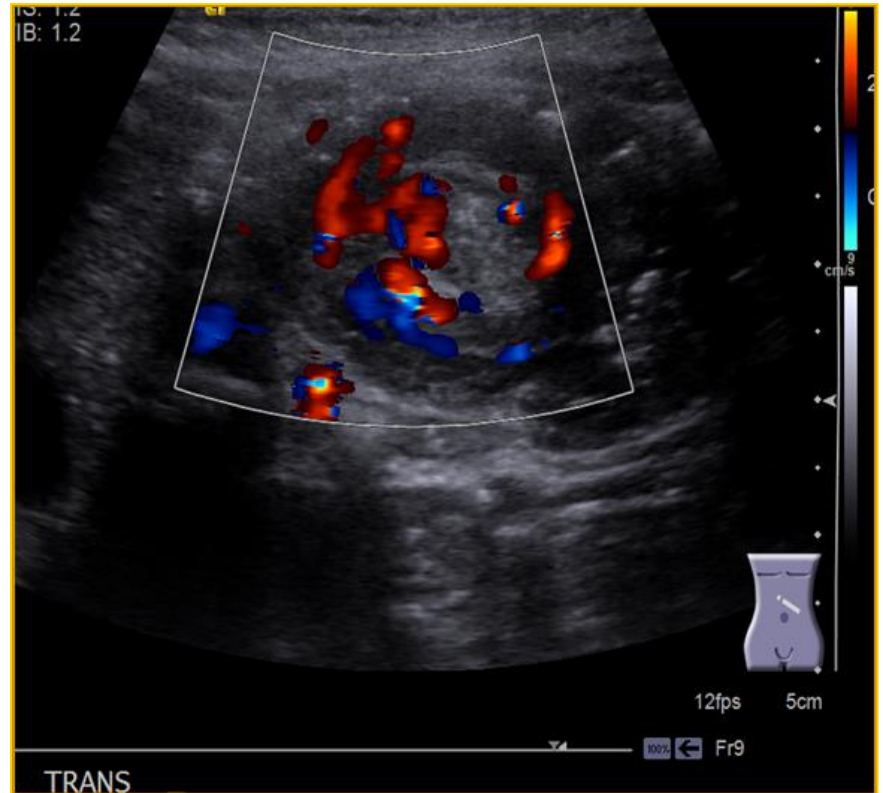
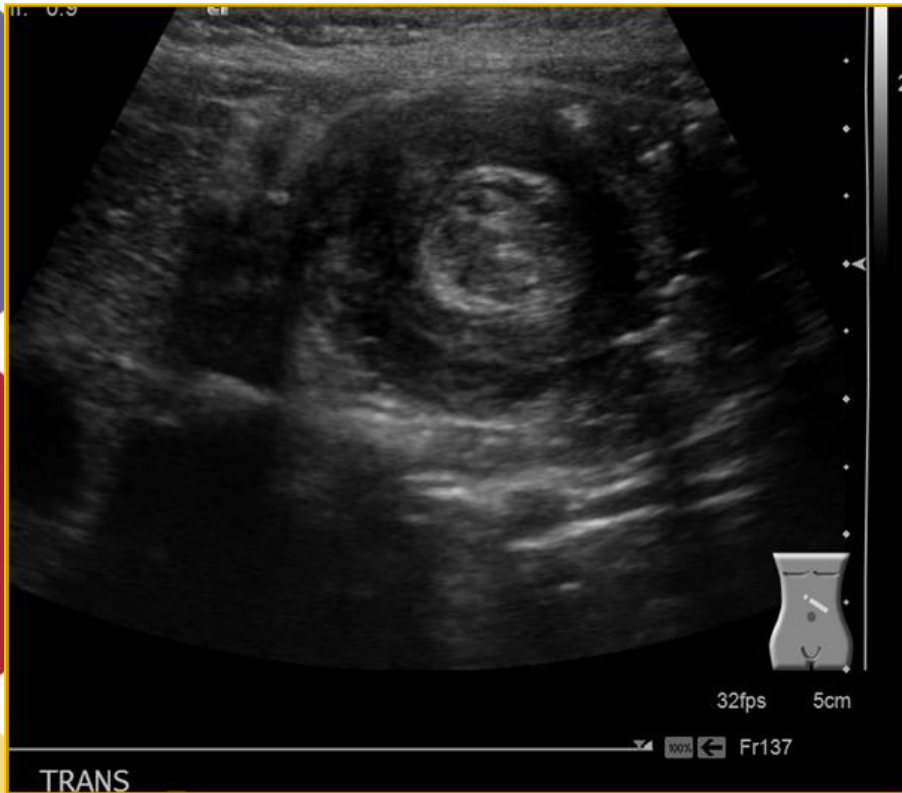


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5 mo M with vomiting, RLQ mass



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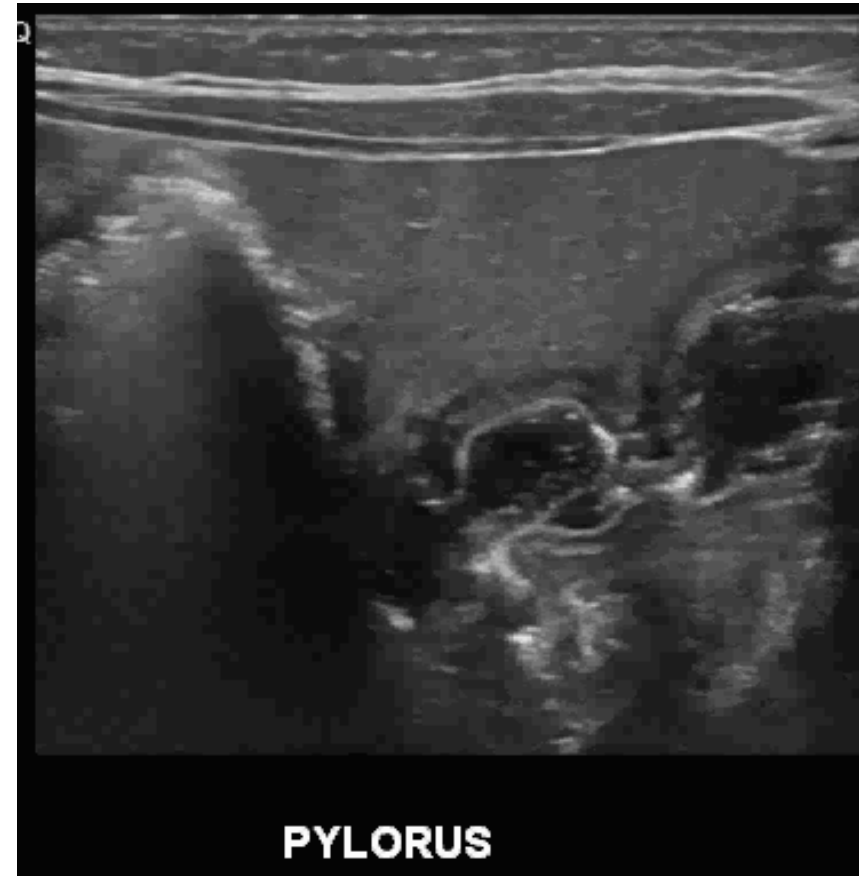
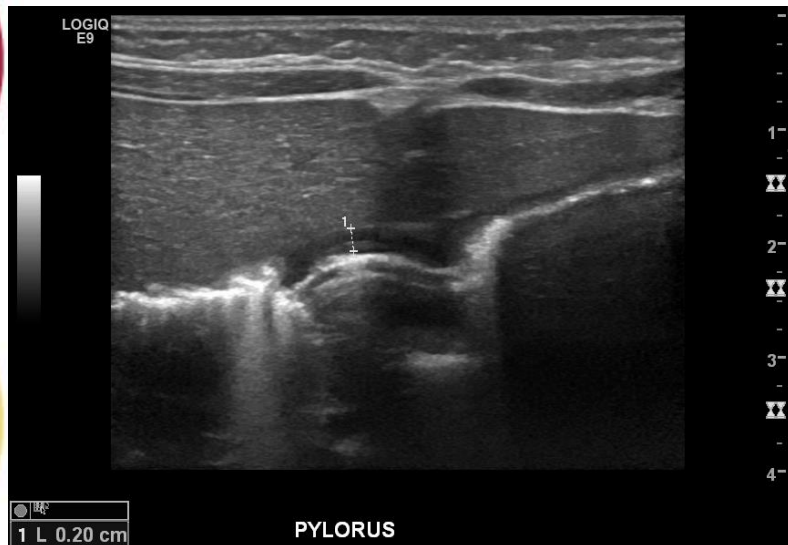
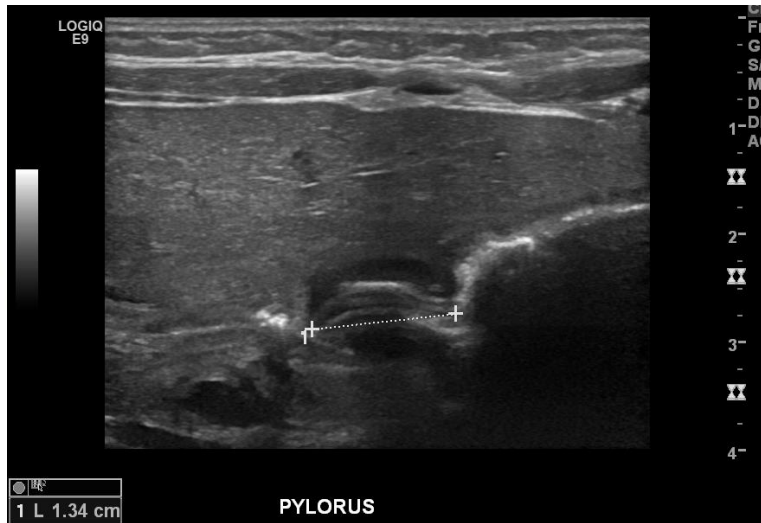


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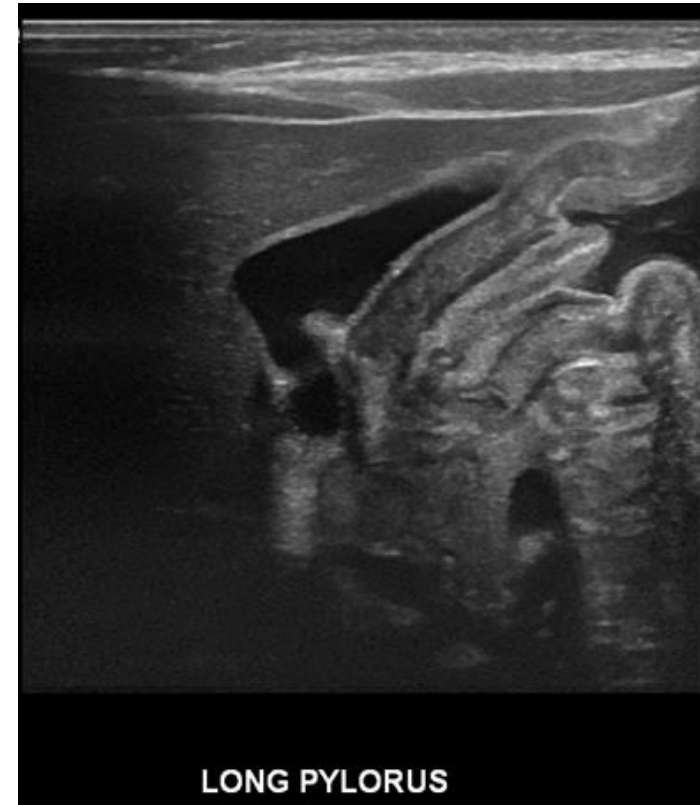
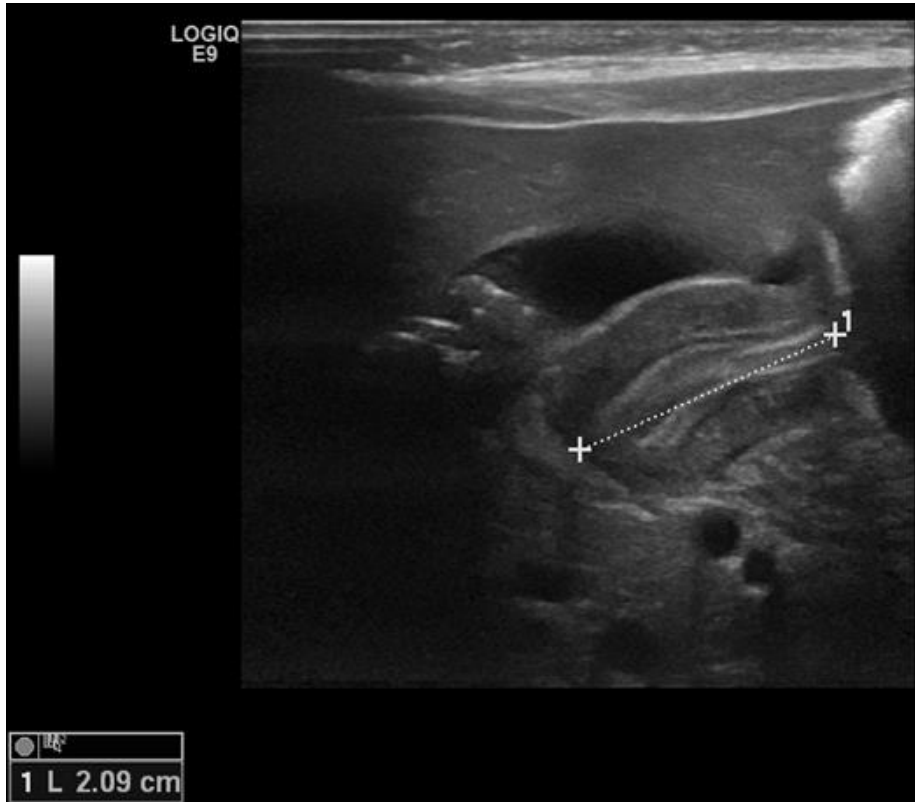
What about small bowel – small bowel intussusception?

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26 day old boy with frequent forceful emesis



23 day old girl with frequent forceful emesis



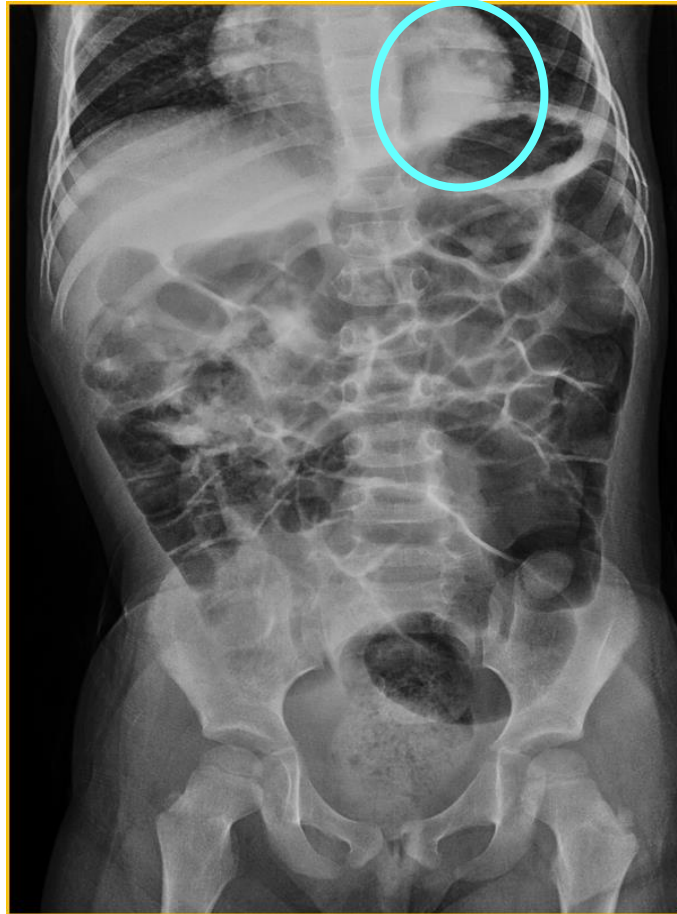
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Not all vomiting originates in the abdomen



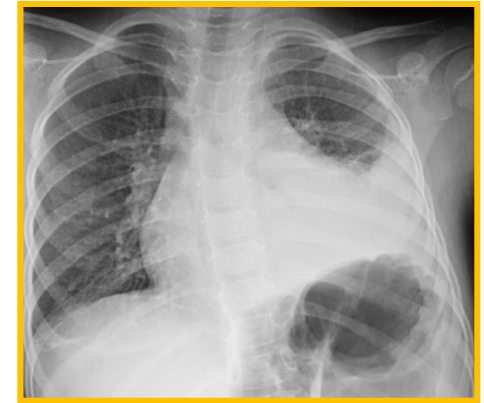
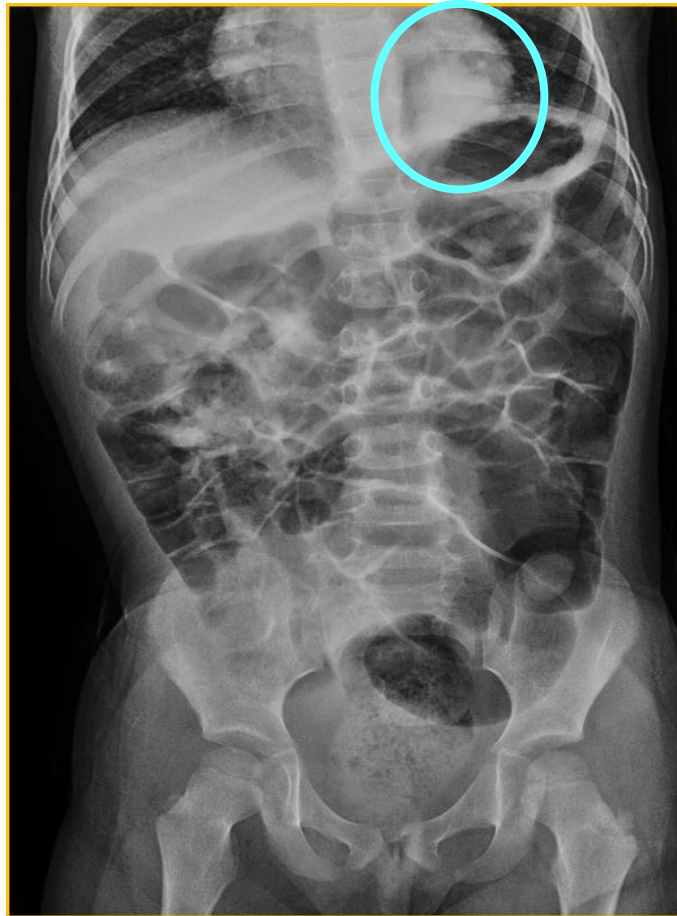
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Not all vomiting originates in the abdomen

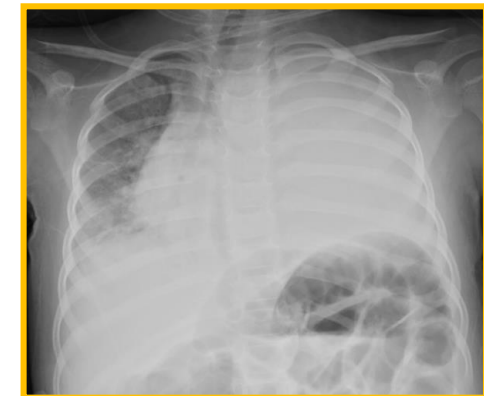


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Not all vomiting originates in the abdomen



4 days later



6 days
later

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