ConstipatED
Give a sh*t
About sh*t

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No Disclosures
Health-related QoL impairment similar to diabetes

Rowling JK (2005)
Wald A, Sigurdsson L (2011)
Stool Burden

• NEDS study from 2011
  – 700k annual ED visits for constipation
  – aggregate cost $1.6 billion

• Largest groups are infants (<1yr) and late elders (>85)

Can’t Miss

Abdrabou (rID: 35721)
History

- Vomiting... flatulence
- Blood and where
- Stool caliber
- Medications

3/day – 3/week

Liu (2011), Henson (1970)
• HPI: Timing, blood, obstructive s/s

• Past Medical History
  – Delayed meconium
  – Urinary incontinence
  – Failure to thrive
Physical Exam
Abdominal XR

• ED evaluation for:
  – Free intra-peritoneal air
  – Severe undifferentiated abdominal pain (volvulus)
  – Radio-opaque foreign body
  – Bowel obstruction

• AXR otherwise not recommended by radiology guidelines (American, British, Australian)

Bertin CL (2019)
Pediatric Abdominal XR

NEC

Volvulus

Double Bubble

Salam (rID: 9793), Singh (rID: 36366), Jones (rID: 24277)
AXR for Pediatric Constipation

• Poor
  – correlation with symptoms
  – sensitivity (60-80%) and specificity (40-90%) in “diagnosing” constipation

• Pediatric GI guidelines (N. American + European):
  “In conclusion, evidence supports not using abdominal radiography to diagnose functional constipation.”

Beinvogl (2017)
Tabbers (2014)
Help Them Sh*t

Mush then Push
Would You Rather?

- Soft stool that exits slowly
- Hard stool that exits quickly
Mush

- Fiber
- Bulking agents
- Polyethylene glycol
Push

Extrinsic innervation

Submucosal plexus

Lumen

Mucosa

Myenteric plexus

Circular muscle

Longitudinal muscle

Rao (2016)
Push

Senna

Bisacodyl
Next Steps

• Suppository
• Disimpaction
• More polyethylene glycol
  – it will work
  – minimal systemic absorption
Outside Our Scope

• Newer agents:
  – linaclotidtide, plecanitide
  – lubiprostone
  – methylnaltrexone

• Biofeedback

• Procedural intervention
Ask about: Emesis, caliber, blood, meds

AXR only looking for surgical emergencies

Mush then Push
References

- Abdrabou A. Radiopaedia.org, rID: 35721
- Salam H. Radiopaedia.org, rID: 9793
- Singh G. Radiopaedia.org, rID: 36366
- Jones J. Radiopaedia.org, rID: 24277

Thank You!