

Meconium Syndromes: 5 min talk

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Distal Neonatal Bowel Obstruction

- Ileal/colonic atresia
- Meconium ileus
- Meconium plug syndrome
- Hirschsprung disease
- Hypothyroidism
- Rare causes: Intussusception, duplication, congenital bands

	Meconium ileus	Meconium plug syndrome
Pathology	inspissated meconium usually at IC junction (pancreatic insuff.- Cystic fibrosis in 80-90%)	? Abnormal motility of left colon (immaturity of ganglion cells) => temporary unlike HD
Presentation	Failure to pass meconium, distention, vomiting “putty sign”: finger indentation of bowel loop	Failure to pass, distention, vomiting
Associated problems	50% Complex (perforation, atresia, volvulus, necrosis, peritonitis, ascites, pseudocyst)	Premature, IDM, mothers taking MgSO4
X-ray	-Distal obstruction, -ground glass/ soap bubble sign (air-meconium) -calcifications (perforation)	- Distal obstruction
Water soluble enema	- Microcolon - Multiple filling defects (meconium pellets) - Distended terminal ileum	- No microcolon (but left colon smaller) - Multiple filling defects (meconium plugs)
Other	- Prenatal = polyhydramnios, calcification	- Rectal Biopsy (if symptoms persist)
Treatment	- Enema or Surgery (complex & unresponsive)	- Enema

Simple Meconium ileus



- Ground glass appearance is not uniformly present on x-ray. Contrast study shows microcolon. When it passes to ileum, meconium pellets will cause filling defects

Meconium plug syndrome



- Smaller left colon with filling defects. Transition zone around the splenic flexure (difficult to differentiate from HD). Suspect if don't improve with 1-2 enemas