Umbilical Hernia

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Background

- Occur as a result of failure of cicatrisation of the umbilical ring following separation of the umbilical cord – allows the peritoneum (with or without intestine) to bulge through the abdominal wall at the base of the navel.
- Most will close by 4 to 5 years of age without treatment.
- Complications including incarceration, strangulation, and rupture are uncommon in children.
- It is important to differentiate true umbilical hernia from paraumbilical and supraumbilical hernias since the latter groups will not disappear spontaneously.

History

- Umbilical swelling which increases in size on crying/straining.
- Older children may get intermittent discomfort indicating intermittent obstruction.
- Strong risk factors associated include low birth weight (<1500g) and African/African-American ancestry.

Examination

- Abdominal examination reveals a fascial defect at the umbilicus, with intact overlying skin.
- Digital examination usually demonstrates easily reducible hernia.
- Pain, redness and tenderness may indicate infection or incarceration.
- Incarceration is rare in children and usually involves the small bowel, resulting in obstructive symptoms such as vomiting, abdominal pain, and constipation.

Differential diagnosis

- Epigastric Herniation (located in the upper abdomen as a result of a defect in the linea alba)
- Herniation of the umbilical cord (occurs in newborns)
- Exomphalos minor (large defect covered by membrane +/- skin, usually diagnosed prenatally or at birth)

Investigations

- No imaging is necessary – diagnosis is based on history and examination.

Management pathway