Acute vomiting in a 1 month old baby boy – the colour of the vomitus matters !

Medical Update Group – UOM 11 Sept 2019

Radio-clinical case in pediatric surgery

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Referral

- Recent case
- Phone call from an experienced pediatrician for referral of a 26 days old baby boy with acute vomiting

- Vomiting curd milk / severe dehydration / BW 3.1kg and actual weight 2.9kg (failure to thrive) / on examination – distended upper part of stomach with visible peristaltic movements of stomach
- Probable diagnosis : hypertrophic pyloric stenosis

Admission

- Severe dehydration -> IV fluids started – bolus 10ml/kg NS over 30min
- Blood investigations sent and urgent abdominal ultrasound requested
- US done within 1h of admission : report relayed to me by phone by RMO in pediatric ward – very large distended stomach , rest of intestines look flat, compatible with HPS
- OT booked for surgery the next morning

Examination and history taking

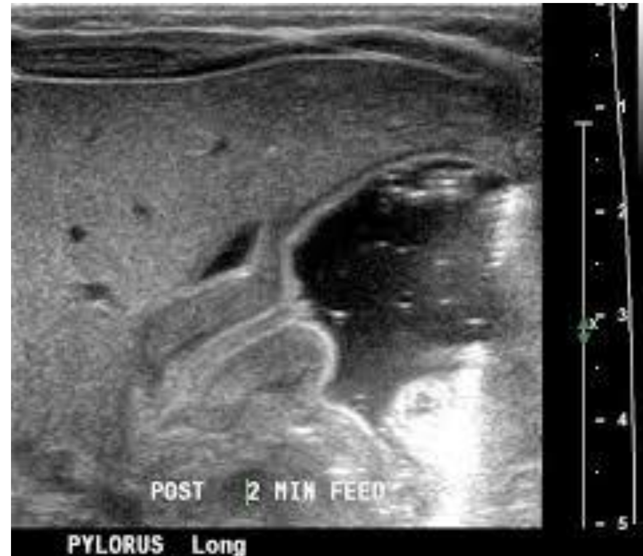
- Baby very weak / unusual for HPS particulary after bolus N/S
- Upper part of abdomen distended/ no olive palpated
- Episode of acute vomiting at Day 9 of life – admitted for less than 24h in public hospital – no report / ? AGE
- Blood results : Cl 101 mmol/L (98-108), Hb 9 g/dL

- Gut feeling of something unusual when I saw a green colour patch on the baby's bib…

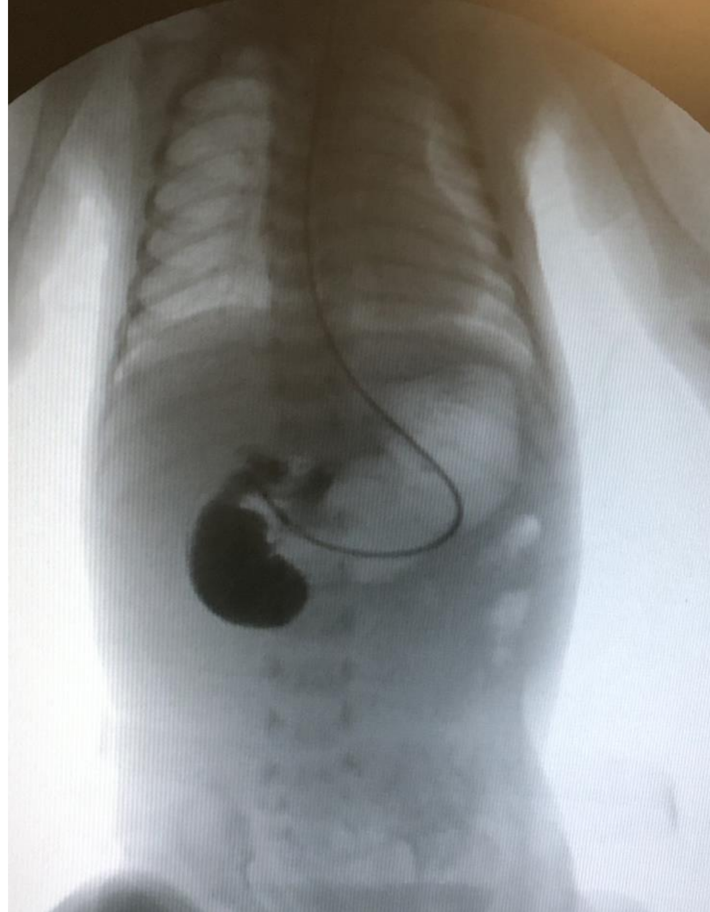
“Se méfier de la solution de facilité…”

- Already 8pm
- OT was booked for next morning
- But …
- “ tout vomissement bilieux chez un nouveau-ne doit etre considere comme un volulus intestinal jusqu’a preuve du contraire…”
- Urgent contrast study – upper GI series.

What we normally see



Upper GI contrast study



What we expect to see

Surgery

- Called anesthetist for immediate surgery (11pm)
- Risk of intestinal gangrene – surgery cannot wait for next morning
- Diagnosis of malrotation of gut confirmed

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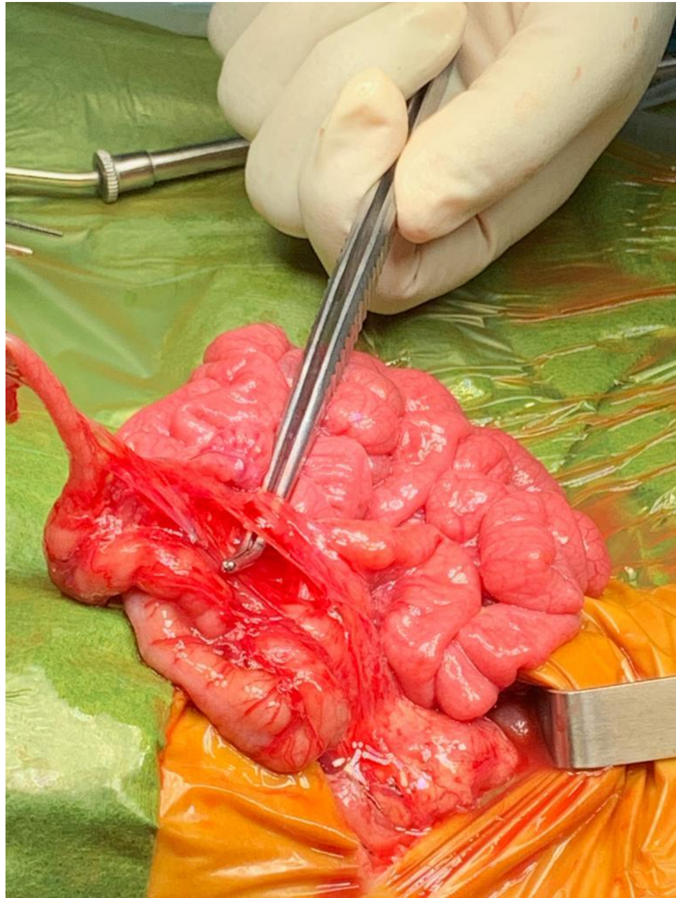
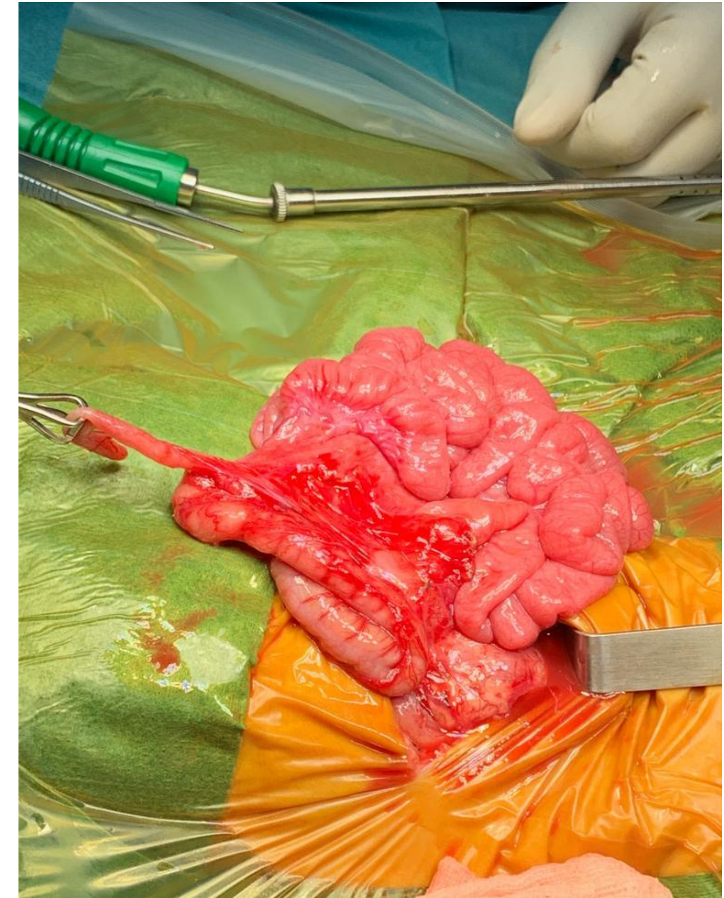


After reduction of midgut volvulus, an abnormal band (Ladd’s band) is seen crossing the root of the mesentery



After section of Ladd’s band

Outcome

- Good
- Baby could be extubated immediately after surgery and could be fed after 24h
- Stayed 5 days for full recovery
- 10 days postop: weight=3.3kg

Conclusion and take home msgs

- In pediatrics, **always pay attention to details** (normal Cl ob blood, abnormally weak baby, episode of vomiting at Day 9 of life…)

- **See radiological images yourself** instead of just reading reports

- For a surgeon, always be ever ready to challenge the “referral diagnosis” / always start with a clean sheet / **tjs se méfier…**