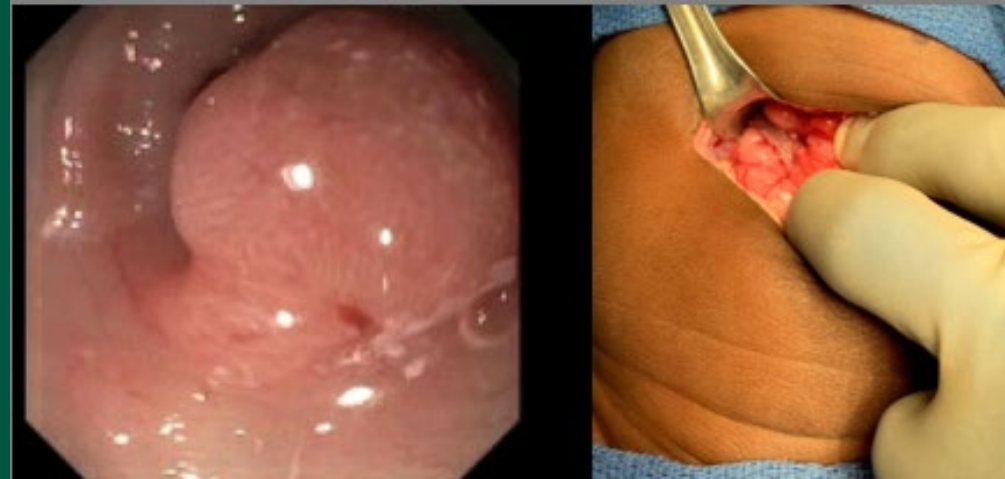


# Incidental Preduodenal Portal Vein Causing Partial Duodenal Obstruction and Hypertrophied Pre-pyloric Gastric Polyp

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## Background

- Preduodenal portal vein (PDPV) is a rare congenital anomaly
- Known rare cause of duodenal obstruction with just over 300 cases reported in the literature
- Diagnosis is typically incidental at time of surgery for other entity



**Figure 1**  
Operative image. Left: EGD showing pre-pyloric mass. Right: intraoperative photos of preduodenal portal vein

## Case Report

- Ex 28+4-week female at day of life 94 scheduled for percutaneous endoscopic gastrostomy (PEG) tube placement
- Endoscopy results with partially obstructing antral polyp (Figure 1)
- PEG aborted in favor of exploration with mass resection

## Management

- Laparotomy performed with PDPV encountered causing partial duodenal obstruction (Figure 1)
- Anterior gastrotomy with resection of posterior wall polyp
- Anterior diamond-shaped duodenoduodenostomy created leaving portal vein in-situ
- 14-Fr Stamm gastrostomy tube placed
- Pathology revealed hyperplastic polyp without malignancy
- Patient convalesced well postoperatively and went home tolerating feeds

## Conclusions

PDPV is a rare anomaly where the portal vein is anterior to the duodenum rather than posterior which can cause a duodenal obstruction. Anterior duodenoduodenostomy is an accepted approach to management. It is felt that the enlarged hyperplastic polyp originally thought to be causing gastric outlet obstruction was hypertrophied due to the more distal duodenal obstruction from the PDPV, a first of its kind.

## References

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