

Duodenal Atresia with Bifid Common Bile Duct



A female infant carried a late prenatal diagnosis of duodenal atresia that was detected via ultrasound examination at 38 weeks of gestation showing a dilated fetal stomach. The patient was born to an otherwise healthy primigravid mother with a history of Hashimoto hypothyroidism treated with daily levothyroxine (Synthroid). The pregnancy and subsequent delivery were uncomplicated, and prior amniocentesis found a 46XX karyotype. At birth, the patient had an abdominal radiograph that showed a distended stomach. The remainder of the abdomen was gasless.

On day of life 2, the patient underwent a diagnostic upper gastrointestinal series that demonstrated delayed emptying of the dilated proximal duodenum, concerning for duodenal obstruction, with eventual opacification of the biliary tree and visualization of the decompressed distal bowel suggesting a bifid biliary tree (Figure). Based on these findings, the patient underwent laparoscopic duodenoduodenostomy where an annular pancreas was identified and the stenotic segment of duodenum was bypassed. The remainder of the patient's hospital course was unremarkable. Although congenital duodenal obstruction is often associated with other congenital anomalies, the presence of bifid bile ducts is thought to be rare.^{1,2} ■

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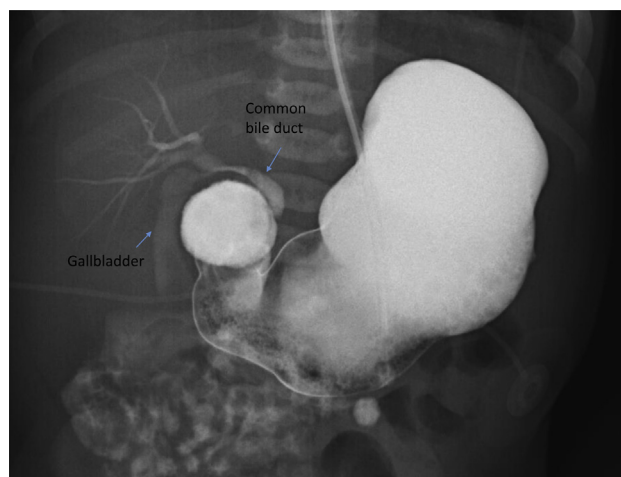


Figure. A delayed image after an upper gastrointestinal series via the nasogastric tube shows contrast within the biliary system and nondilated loops of small bowel.

References

1. Mali V, Wagener S, Sharif K, Millar AJ. Foregut atresias and bile duct anomalies: rare, infrequent or common?! *Pediatr Surg Int* 2007;23:889-95.
2. Reid IS. Biliary tract abnormalities associated with duodenal atresia. *Arch Dis Child* 1973;48:952-7.