Images:

Bleeding ileal duplication diagnosed by pertechnetate scan

A 2-year-old boy presented with four episodes of fresh rectal bleeding in the fourth month of life, without history of abdominal pain, distension, vomiting, bleeding from any other site, fever or jaundice. Except for pallor the general examination was normal. There was no abdominal lump or organomegaly. Per rectal examination did not reveal any polyps. Extensive work-up done elsewhere, including tests for coagulation disorder, liver and renal function tests, ultrasonography and CECT abdomen, were inconclusive. Upper and lower GI endoscopy had also been inconclusive.

Sodium $^{99m}$tetroxide pertechnetate scan revealed uptake of $^{99m}$Tc in a large segment of small intestine, signifying presence of ectopic gastric mucosa (Fig). A provisional diagnosis of duplication anomaly was made. At surgery, a 60-cm tubular duplication was found in the mid ileum. The duplicated intestine was resected along with adjacent ileum, and intestinal continuity was restored. The child recovered uneventfully.

Small bowel duplications may present as ante-natally diagnosed intra-abdominal cyst or postnatally with intussusception, volvulus, perforation or GI bleed. GI bleed is painless and substantial; it is commonly seen with tubular duplications. Bleeding is due to ulceration of ectopic gastric mucosa that is often present in symptomatic cases. Pertechnetate scan can detect ectopic gastric mucosa with a sensitivity of 85% and specificity of 95%.¹

References