Acute appendicitis in left scrotum

We read the article by Sharma et al about the occurrence of acute appendicular perforation in a right inguinal hernial sac. This entity has been described earlier in children. In fact, the first recorded appendectomy in 1736 was performed by Claudius Amyand, surgeon to King George II, on an 11-year-old who had a perforated appendix within an inguinal hernia. The term Amyand's hernia has been used variously to refer to occurrence of an inflamed appendix within an inguinal hernia, a perforated appendix within an inguinal hernia, or a non-inflamed appendix within an irreducible inguinal hernia.

A 35-year-old man presented with left inguinoscrotal swelling since two months, and acute pain in the left scrotum associated with vomiting since one day. Clinical examination revealed tachycardia with tender left inguinoscrotal swelling. A clinical diagnosis of strangled inguinal hernia was made. Operative findings included inflamed appendix with inflammatory fluid in the left hernial sac. The terminal ileum and cecum were minimally congested. Appendectomy was done with exploration of the small bowel, which was normal. Modified Bassini's herniorrhaphy was done. Postoperative recovery was uneventful. Barium study after six weeks ruled out situs inversus.

The incidence of appendicitis within an incarcerated hernia is 0.13%. A majority of these are in children and in right-sided inguinal hernia. Appendix in left inguinal hernia, and its presentation in adults, is rare. Presence of cecum and appendix in the left inguinal hernia is seen in situs inversus, intestinal malrotation or mobile cecum.

At surgery, if the peritoneal cavity is uncontaminated it must be protected from contamination. Introducing a foreign material into a contaminated field has its dangers. It has been recommended that repair be done without using a synthetic mesh.

G D Bakhshi, A H Bhandarwar, A A Govila
Department of Surgery, Grant Medical College and Sir J J Group of Hospitals, Mumbai 400 008

References
2. Amyand C. Of an inguinal rupture, with a pin in the appendix caecii incrusted with stone; and some observation on wounds in the guts. Phil Trans R Soc Lond 1736;39:329-42.

Correspondence to: Dr Bakhshi. E-mail: gdbakhshi@yahoo.com

Gastric ulcer detected incidentally by renal scintigraphy

Technetium-99m labeled RBCs and diethylene-triaminepentacetic acid (DTPA) human serum albumin (HAS-D) are widely used in radionuclide gastrointestinal bleeding studies. We report a patient in whom gastric bleeding was suspected on the basis of incidental findings on renal scintigraphy with Te-99m DTPA.

A 68-year-old man was hospitalized with acute-onset chest pain and was diagnosed to have aortic dissection. Stool testing revealed occult blood. Investigations: hemoglobin 9.3 g/dl, white blood cell count 11,800/mm³, serum creatinine 1.12 mg/dl, blood urea nitrogen 25 mg/dl. Contrast-enhanced CT scan revealed aortic dissection extending from the descending aorta to the right iliac artery, and dysfunction of the left kidney. Renal scintigraphy with Te-99m DTPA revealed left renal dysfunction and an unexpected area of tracer accumulation in the left upper abdomen, suggesting a possibility of gastric bleeding. Gastric scintigraphy confirmed the presence of a bleeding gastric ulcer. He was treated with H2-receptor blockers.

Te-99m labeled RBCs and Te-99m HAS-D are blood pool agents, and persist in the circulation for a long time, resulting in high background activity, which tends to mask the site of bleeding, sometimes with failure to

Fig: Renal scintigraphy with Te-99m DTPA showing left renal dysfunction and tracer accumulation in left upper abdominal region, suggesting gastric bleeding.
localize the site of bleeding.\textsuperscript{2} \textsuperscript{\textsuperscript{99m}Tc-DTPA} is used for renal scintigraphy, but can sometimes detect active bleeding from the gastrointestinal tract.\textsuperscript{3,4} The major disadvantage of this radionuclide is its rapid clearance from the vascular pool, making it less useful for detection of intermittent and slowly bleeding sites.\textsuperscript{4} Renal uptake makes it difficult to detect bleeding from structures in the upper part of the abdomen.\textsuperscript{4} In our case, renal scintigraphy with \textsuperscript{\textsuperscript{99m}Tc-DTPA} allowed diagnosis of a gastric ulcer because of active bleeding.

Kenji Torii, Joji Kawabe, Takehiro Hayashi, Ai Oe, Jin Kotoi, Etsushi Kawamura, Susumu Shiomi, Shuhei Nishiguchi* Departments of Nuclear Medicine, and *Hepatology, Graduate School of Medicine, Osaka City University, Osaka, Japan

References

Correspondence to: Dr. Kawabe. Fax: +81 (6) 6686 0586. Email: kawabe@med.osaka-cu.ac.jp

---

Image

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 \textsuperscript{\textsuperscript{99}Tc} pertechnetate scan revealed uptake of \textsuperscript{\textsuperscript{99}Tc} in a small segment of small intestine, indicating 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 antenatally 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%.

A K Singal, C S Bal,* M Srinivas, V Bhatnagar Departments of Pediatric Surgery and *Nuclear Medicine, All India Institute of Medical Sciences, New Delhi 110 029

Reference

Fig: Technetium pertechnetate scan showing uptake of isotope in long segment of intestine. Resected specimen is at bottom.