

Clinical Challenge 9:

A 12 year old boy had undergone upper GI endoscopy and colonoscopy after he was reviewed in outpatient department with complaints of abdominal pain and varying bowel habits. Upper GI endoscopy was normal. The registrar had palpated a mobile hard mass by digital examination prior to colonoscopy. Peri anal area inspection was normal. Colonoscopy was normal. MRI abdomen was arranged which showed a low intensity mass with a central high intensity area in the pelvic cavity. Blood tests and biopsies from upper GI tract and colon were normal. Child had undergone a laparoscopy and this 'benign' mass was removed.

What is the most likely diagnosis?

Answer to Clinical Challenge 9:

The correct answer is **peritoneal loose body** in the pelvis.

The high-intensity area observed in the centre of the mass in MRI was identical to that seen in fatty tissues. The boy underwent laparoscopic surgery and a hard, white, egg-shaped peritoneal loose body that was completely free in the pelvic cavity was removed. The mass composed of many layers of laminated, fibrous tissues surrounding a central necrotic fatty lesion. The differential diagnosis is often stromal tumors or teratoma. Loose bodies are more often reported in adults compared to children.

The general belief is that peritoneal loose bodies arise owing to torsion and separation of the appendices epiploicae, which are visceral peritoneal pouches filled with fat that exist along the anti-mesenteric tenia of the colon. Small peritoneal loose bodies rarely cause symptoms, large ones (> 5 cm) could present with many abdominal symptoms. Surgical removal is advised for large and symptomatic peritoneal loose bodies.