Volvulus of a Wandering Spleen

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Clinical Image

A 30-year-old woman with no notable medical history presented to the emergency department for acute abdominal pain. Abdominal Computed Tomography (CT) scan showed a congestive spleen in the pelvic space (16 cm length), with torsion of the splenic pedicle without infarction. She underwent an urgent laparotomy with detorsion of the pedicle, thrombectomy of splenic vein thrombosis and splenopexy using a mesh, in the left upper quadrant. Ultrasonography at the end of the procedure showed good viability of the spleen. Unfortunately, the postoperative day 1 CT scans showed infarction of the spleen which led to a reintervention. During exploratory surgery, the spleen was « blue » due to stopped flow inside the splenic vessels and a splenectomy was required. The postoperative course was uneventful, and the patient was discharged on the postoperative day 4.

A wandering spleen is a rare disorder caused by the absence or increased laxity of the splenic ligaments. Consequences are elongation of the splenic vessels that may predispose to volvulus or even infarction and necrosis of the spleen. The clinical presentation of wandering spleen may vary from asymptomatic abdominal or pelvic mass to chronic abdominal pain caused by intermittent vascular torsion or life-threatening acute abdomen requiring immediate surgery caused by splenic infarction [1]. Intermittent volvulus of the splenic pedicle is thought to result in splenomegaly secondary to venous congestion and potentially led to hypersplenism [2]. There is lack of evidence in the management of an incidentally discovered wandering spleen. Because of the unpredictable risk of acute complications leading to urgent splenectomy, a watchful attitude may not represent the safest attitude and a planned surgery appears to be the only therapy in such circumstances with spleen-preserving procedure such as laparoscopic splenopexy highly desirable, especially in a young patient [3,4]. Upfront splenectomy and auto transplantation of spleen tissue within an omental pouch may represent a valid surgical strategy. For patients with thrombosed splenic vein (as in our case), this should be encouraged (Figure 1).

Keywords: Spleen; Computed tomography; Ultrasonography; Volvulus

Figure 1: A contrast-enhanced CT scan of the abdomen shows coronal views (A) of a wandering spleen (blue star) with torsion of the splenic vascular pedicle (yellow arrow) and the tail of pancreas (red arrow). An operative view during initial operation showed the torsion (B).
References


