Case report

Splenoptosis (Wandering Spleen)

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Summary

Splenoptosis which is a congenital fusion anomaly of dorsal mesogastrium in children is a very rare entity. In the literature cases are usually diagnosed at operation and it is noted that in former years splenectomy had a special place among various methods of treatment. In this report, a 7-year-old case of splenoptosis diagnosed on ultrasonography and isotope scintigraphic methods preoperatively and treated by splenopexy is presented. In cases with splenoptosis the clinical and radiologic diagnostic criteria are given and the importance of splenopexy in treatment is emphasized.

Key words

Splenoptosis – Splenopexy

Résumé

L'anomalie congénitale comportant une fusion du mésogastre dorsal chez les enfants est une entité très rare appelée splénoptose. Le diagnostic de ces cas est surtout per-opératoire; sur le plan thérapeutique, on pratique le plus souvent une splénectomie. Les auteurs présentent l'observation d'un enfant de 7 ans, chez qui l'ultrasonographie et la scintigraphie isotopique a permis le diagnostic. Une splénopexie a été pratiquée. Les critères diagnostiques cliniques et radiologiques sont précisés. La splénopexie est préférable.

Mots-clés

Splénoptose – Splénopexie

Zusammenfassung

Splenoptosis, eine kongenitale Fusionsanomalie des dorsalen Mesogastriums, ist eine sehr seltene Anomalie. Sie wird meist erst bei der Operation diagnostiziert. In der Literatur wird als Therapie der Wahl die Splenektomie angegeben. Hier wird ein 7jähriger Knabe vorgestellt, bei dem mittels Ultraschall und Szintigraphie eine Wandermilz diagnostiziert wurde. Es wurde eine Splenopexie durchgeführt.

Schlüsselwörter

Splenoptosis – Splenopexie – Wandermilz

Introduction

Splenoptosis exclusively in pediatric age group is a rare entity and is characterised by the absence of normal ligamentous adjuncts of the spleen to the diaphragm, retroperitoneum and colon (6). Being a congenital incomplete fusion abnormality of the dorsal mesogastrium usually it is seen in conjunction with splenomegaly and a lengthened pedicle (5, 7). Cases present with intermittent abdominal pain, vomiting, anorexia or with acute abdominal symptoms as a result of the vascular pedicle torsion of the spleen. It could also be diagnosed incidentally with none of the abdominal complaints. The suggested treatment is splenopexy excepting in acute torsion with infarction. A case is presented in which a preoperative diagnosis of splenoptosis was made which was treated by splenopexy.

Received June 24, 1992

Eur J Pediatr Surg 3 (1993) 174–175

Case report

C. P., a 7-year-old female, was admitted with complaints of intermittent abdominal pain and dysuria since the age of one year. She was hospitalized presenting with the same complaints having passed no urine for 24 hours and having a suprapubic mass which had been recognized by the family.

At physical examination a mass was palpated nearly 15 × 10 cm in dimension filling the space between the umbilicus and the symphysis pubis with regular limits, upper and lower poles distinguishable, ovoid and notched edged and of hard consistency. Liver and spleen were nonpalpable with otherwise normal laboratory and clinical findings.

At ultrasonographic investigations the spleen could not be detected in the usual site; however, a similar echogenic mass of 130 mm in diameter was found at the suprapubic area. The liver and spleen scintiscans by Tc99m sulphur colloid technique revealed a normal liver and a larger than normal spleen localized suprapubically (Fig. 1).

At operation the spleen was at the introitus of the pelvis; while the pedicle together with distal pancreas was found twisted 180 degrees and freely angled inferiorly. The spleen was approximately 15 × 10 × 5 cm in dimension. All the other intraabdominal organs were found normal. The pedicle was untwisted and then the spleen was

Fig. 1 Preoperative scintiscan showing the normal liver and the spleen which is localized at the suprapubic area.

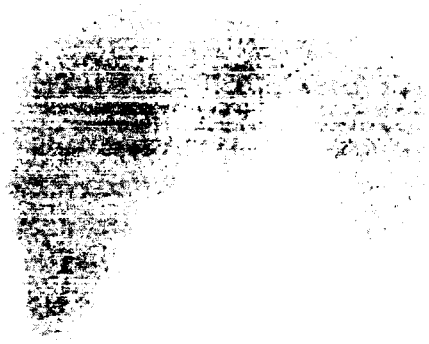

Fig. 2 Postoperative scintiscan showing normally localized liver and the spleen.

brought to its normal location. After a control period checking its circulation, the spleen was fixed to the left lateral abdominal wall with two heavy silk sutures. The patient was discharged on the fifth day after an uneventful recovery.

At her follow-up after 3 and 18 months postoperatively there were no clinical complaints. Although the spleen was 3 cm palpable at the left costal margin, ultrasonographic and scintigraphic investigations revealed the spleen at its normal site (Fig. 2).

Discussion

The clinical presentation of the wandering spleen is variable. While the patients may be asymptomatic they may present with severe abdominal pain. The clinical diagnostic criteria for such patients are 1) chronic intermittent abdominal pain, 2) midabdominal/midpelvic oval mobile mass with a notched edge, 3) absence of dullness on percussion in the left upper quadrant (Spleen lodge), 4) painless tracking of the inferior medial mass to the left superior quadrant (1, 2). A differential diagnosis of acute appendicitis, torsion of an ovarian cyst and intestinal obstruction should be considered (3). Multiple imaging modalities can suggest and confirm the diagnosis. Conventional radiography, including barium studies and IVP are nonspecific; however, they can suggest the diagnosis. Ultrasonography can identify the abdominal mass as an ectopic spleen and show absence of spleen in its original position. Radionucleid imaging complements ultrasound in confirming the diagnosis of wandering spleen; CT and NMR should be the next examinations (1, 3, 6). Invasive tests such as angiography are rarely needed (1, 7). In cases with wandering spleen surgical intervention should be conservative considering the role of the spleen (1, 3, 6, 7). For this reason splenopexy is the preferred intervention. In cases admitted with torsion of the spleen, and if an infarct is induced, splenectomy is the method of choice. However, in cases where circulation could be provided, splenopexy is indicated.

We are of the opinion that asymptomatic cases could be managed accordingly. If we consider the proneness of the spleen to trauma, replacing it into its original location will preserve its function and protect it from injuries as well.

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