

Laparoscopic splenectomy for wandering spleen in a child

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This case report describes the laparoscopic treatment of a rare clinical entity: a wandering spleen. In our case splenectomy was performed because of the risk of leaving behind a necrotic spleen due to a possible hilar thrombosis.

The laparoscopic approach was preferred in order to reduce postoperative pain, adhesion formation and psychological damage.

KEY WORDS: Laparoscopy - Wandering spleen - Splenectomy

Reports on the use of laparoscopy in paediatric surgery are scarce. However, the advantages of this minimally invasive technique are obvious. In order to document this, we would like to report the laparoscopic exploration for diagnostic confirmation and treatment in a rare case of a "wandering" spleen in a child.

Materials and methods

A 35-lbs, 6 years old female child was admitted to the paediatric emergency department because of a 4-day history of crampy abdominal pain located in the left lower quadrant. On physical examination she revealed generalized guarding, rebound tenderness and an 8 x 5 cm, mobile and very tender mass in the left lower quadrant. CT scan revealed bowel sub-obstruction and a spleen wandering in the left flank. Intravenous contrast enhancement demonstrated an infarction of the cephalad part of the spleen and a volvulus of the splenic hilus without involvement of the pancreatic tail. Doppler examination could not document hilar blood flow.

Anti-hemophilus, anti-pneumococci and anti-meningococci vaccines were given and the patient was taken to the operating room for laparoscopic exploration. Trocars were

placed according to preoperative imaging localization of the wandering spleen. The spleen appeared infarcted, as the hilus was doubly twisted. Untwisting of the spleen, which was not attached by any other means than by its hilus, failed to revascularize the organ.

A splenectomy was performed because of possible hilar thrombosis. The splenic artery and vein were ligated with an intracorporeal 2-0 silk knot and severed. The spleen was then morcellated in a bag. Operating time was 2 hours. Estimated blood loss was less than 20 cc. The postoperative course was remarkably simple as evidenced by the fact that the patient was ambulating as of the fourth postoperative hour and that pain was entirely controlled by three oral intakes of 250 mg paracetamol.

Discussion

Splenopexy, which is the best treatment for wandering spleen,¹ was not performed in this case. Removing the spleen in this child over 2 years of age seemed safer than taking the risk of leaving behind a possibly necrotic spleen.^{2,3}

Thanks to our experience with 12 previous adult cases, the laparoscopic procedure could be performed in as little as 2 hours despite the fact that, unlike Delaitre,⁴ we manually ligated the hilus. Manual ligation with intracorporeal knotting technique seems safer since it mandates perfect dissection of the vessels and, hence, reduces the chance of accidental pancreatic lesions.

The use of laparoscopy in this case, permitting a negligible blood loss thanks to the improved visual acuity seems advantageous as compared with conventional exploratory laparotomy with its consequences of postoperative pain, long hospitalization, adhesion formation and psychological and aesthetic damage, especially in a child.

References

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