Is Total Splenectomy Unavoidable in the Treatment of Splenic Benign Cyst?

Enver Zerem  Goran Imamović  Rasim Jusufović
University Clinical Center Tuzla, Tuzla, Bosnia and Herzegovina

Dear Sir,

We commend Bai and Wang [1] for an interesting clinical image of the article ‘a primary splenic cyst in a 10-year-old boy’. They note that CT revealed a large left upper-quadrant spherical cystic mass with a smooth wall and normal splenic tissue which was visualized around all or part of the cyst.

However, we wish to highlight certain issues regarding total splenectomy for benign cysts especially in young people. The spleen is important for proper immunologic function, and splenectomy carries an increased morbidity rate with the danger of postsplenectomy infections. Current therapeutic strategies established spleen-preserving treatment in cases of trauma and benign lesions [2, 3]. Therefore, we consider that percutaneous drainage or laparoscopic excision should be used instead of total splenectomy as the treatment of choice for splenic benign cysts [2–6]. Besides, it is highly questionable whether the boy’s health condition would be better with asymptomatic splenic benign cyst or without cyst, but also without the spleen.

References

Dear Sir,

We thank Prof. E. Zerem for his comments in his letter to the editor. We would like to reply to several points raised by him.

The treatment of splenic cysts is still controversial. With respect to the optimal treatment in children, standard pediatric surgical textbooks remain vague. Various techniques are suggested: percutaneous drainage, conventional open splenectomy, partial splenectomy or cystectomy, marsupialization, fenestration or unroofing with drainage into the peritoneal cavity [1,2]. Indications for surgical procedure depend mainly on the clinical manifestations and cyst size. A nonoperative approach is the usual treatment of choice if the diameter of the cyst is ≤5 cm. If the cyst is >5 cm in diameter or symptomatic, it is generally accepted that a surgical intervention should be performed [1,3,4]. Whether nonoperative or operative treatment, ultimately, the success of any procedure aimed at managing splenic cysts is the absence of recurrence.

Percutaneous drainage of the splenic cyst, with or without sclerosing, has demonstrated a high incidence of recurrence and cannot be recommended [1,3,5]. The epithelial layer in the remaining spleen after a marsupialization or deroofing operation seems to be responsible for the recurrences [1,2,6].

In general, recurrent cysts are complicated and cause more discomfort than primary cysts [5]; more frequently, they ultimately require splenectomy [7,8]. The surgical strategies depend on cyst size and location, relation to the hilus and major splenic vessels, as well as the number of cysts [1,4,9–13].

It is accepted that the surgeon should attempt to preserve as much of the spleen parenchyma as possible in the treatment of splenic cysts. Thus, open total splenectomy – once the standard of care – has largely been replaced by spleen-sparing procedures. However, open total splenectomy ensures total cyst removal, avoidance of cyst-related complications and no cyst recurrence. Sometimes it is necessary to perform complete splenectomy.

Any type of spleen-sparing procedure (especially partial splenectomy) is difficult to perform if the cyst is very large, is located in the splenic hilum, is covered completely by the splenic parenchyma (intrasplenic cyst) or if there are multiple cysts (polycystic cases). In these cases, because of recurrence and the risk of intractable bleeding from the spleen, a complete splenectomy should be performed using either the open or the laparoscopic approach [1,4,8,10–13].

On the other hand, if another surgical approach is carried out, for example a partial splenectomy, and the intraoperative bleeding becomes uncontrollable, one has to convert to total splenectomy without hesitation [1]. As in our case, during exploratory surgery, the splenic cyst is very large and is centrally and deeply located or displaces the splenic hilum to such a degree that partial splenectomy is technically impossible, a safe complete total splenectomy was performed.

In addition, we only reported an individual case rather than a standard approach to splenic cysts.

Based on our limited experience, we consider that a large splenic cyst >10 cm in diameter, located in the splenic hilus or covered completely by the splenic parenchyma, should be treated by splenectomy to prevent the possibility of cyst recurrence and reoperation (ultimately total splenectomy).

References


Yu Zuo Bai, Wei Lin Wang
Department of Pediatric Surgery, Shengjing Hospital, China Medical University, Shenyang, PR China

Tel. +86 248 395 6608, Fax +86 242 389 2617
E-Mail: wwelin@hotmail.com