

Sezeryan esnasında tespit edilen ve barsak rezeksiyonuna sebep olan intestinal splenosis

An incidental finding of intestinal splenosis during caserean section resulting in bowel resection

Mehmet Kamil Yıldız¹, Aysun Unal², Erkan Özkan¹, Cengiz Eris¹, Hasan Abuoğlu¹,
Gultekin Kose², Bülent Kaya¹, Umit Topaloglu²

¹Haydarpaşa Numune EAH Genel Cerrahi Kliniği

²Haydarpaşa Numune EAH Kadın Hastalıkları Ve Doğum Kliniği

Özet

Splenosis genellikle travmatik dalak yaralanması sonrası görülen benig bir durumdur. Genellikle asemptomatiktir ve rastlantısal olarak bulunur ancak maligniteyi taklit edebilir. Splenik nodüller karın boşluğu, toraks boşluğu ve ciltaltı gibi bir çok yerde bulunabilir. Tedavi çoğunlukla konservatiftir. Komplike durumlarda cerrahi gerekebilir. Bu makalede sezeryan sırasında tesadüfen bulunan ve maligniteyi taklit ederek barsak rezeksiyonuna neden olan intestinal splenosis olgusu sunulmuştur.

Anahtar Kelimeler: splenosis, splenectomy, ince barsak, rastlantısal, cerrahi

Türkçe Kısa Makale Başlığı: intestinal splenoz. vaka takdimi

Abstract

Splenosis is a benign condition that frequently occurs after traumatic spleen rupture. It is often asymptomatic and found by coincidence, but as it can mimic malignancy, it often leads to an extensive workup before the diagnosis is established. Splenic nodules can be found anywhere in the thoracic or abdominal cavity, as well as subcutaneously. Treatment is usually conservative with surgical excision reserved for complicated cases. This article describes a case of incidental intestinal splenosis during caserean section, masquaring malignancy, leading to bowel resection.

Key words: splenosis, splenectomy, small bowel, incidental, surgery

İngilizce Kısa Makale Başlığı: Intestinal splenosis: case report

İletişim (Correspondence):

Op.Dr. Mehmet Kamil YILDIZ/İstanbul Haydarpaşa Numune Eğitim Ve Araştırma Hastanesi

E-Mail: drmkemalyildiz@gmail.com

Tel: 02165423200

Introduction

Splenosis, the heterotopic autotransplantation of splenic tissue, is a common benign condition among patients with a history of splenic trauma and surgery (1). Most cases of splenosis are intra-abdominal due to direct seeding of surrounding structures, although these ectopic rests may occur almost anywhere in the body, and its appearance may raise the suspicion of primary or metastatic cancer. Confirmation of splenic tissue can be made by computerized tomography (CT), single-positron emission computed tomography (SPECT), technetium-99m (Tc-99m) sulfur colloid scintigraphy, or with Tc-99m heat-damaged red blood cells for symptomatic cases (2).

In a patient with a history of splenectomy, splenosis can act and provide the function of the spleen and thus should not be routinely excised (3). In case of a history with posttraumatic splenectomy who was discovered incidentally to have multiple intra-abdominal nodules by CT scan, these lesions can be followed-up until they become complicated.

In the present study, we report a case of a woman who underwent splenectomy because of a gun-shot injury in her childhood, currently found to have intestinal splenosis during caserean section and suspected malignancy.

Case reports

A 37 year-old woman, with a history of splenectomy due to gun shot injury while she was at 7 years, underwent caserean section operation. During exploration through Pfannenstiel incision, two different masses, 4 cm and 2 cm in diameters, were seen on the serosa of small bowel invading the wall. These lesions were reddish brown in color, round, heterogenously solid in character, and with irregular lobulated margins suggesting malignancy (Figure 1)

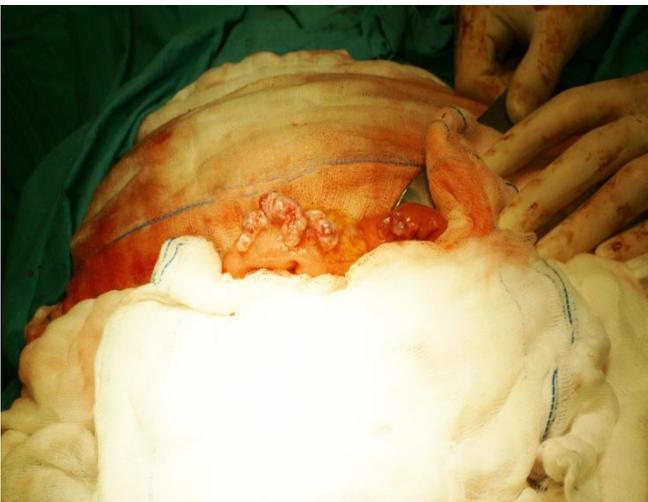


Figure 1. Intestinal splenosis

Biopsy was avoided to prevent dissemination of the probable carcinoma. Bowel resection and end to end anastomosis was done for the bigger mass, and a wedge resection was done for the smaller one. Baby was delivered without any problem. Patient did well postoperatively. Histopathologic examination demonstrated benign lesions of ectopic splenic tissue (Figures 2 and 3).

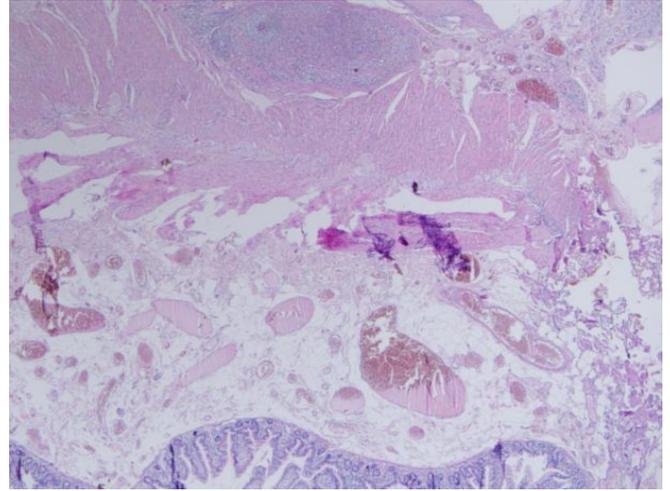


Figure 2. Thick, fibrous capsulated accessory spleen tissue in the adipose tissue of subserosa and serosa of small intestine (H&E, 4X100).

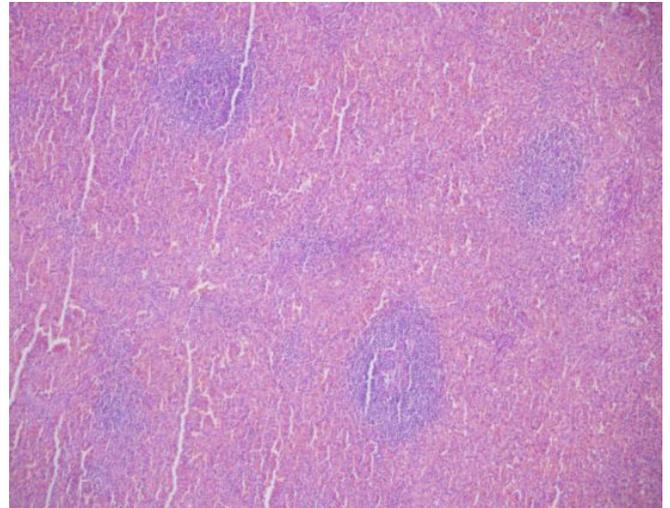


Figure 3. Periarteriolar lymphoid cuffing and the surrounding primary follicles (white pulp) and distended venous sinuses with Billroth cords and macrophages (red pulp) were seen in the splenic parenchyma (H&E, 20X100).

On gross section, the masses were seen to be firmly attached to the serosa of the bowel, sparing the mucosa and muscular layers

Discussion

Splenosis is the autotransplantation of splenic tissue resulting from the dissemination of cells from the pulp of the spleen after splenic injury or splenectomy (1). Implants can be found anywhere in the peritoneal cavity, especially on the serosal surfaces of small and large bowel, in the mesentery and diaphragm, implanted in visceral organs, within the thorax and brain, and in surgical scars and may vary in number, shape, and size. Rare localizations such as ovaries, pancreas and liver have also been reported in the literature (4, 5, 6). The lesions usually appear as multiple, well-circumscribed, small, round, homogenous solid masses (7).

Although the presence of ectopic splenic tissue is usually detected incidentally, this pathology can be evident by pain in the pelvis or it can be confused with other pathologies such as hemangiomas of intestine, and endometriosis including metastasis carcinoma (8). It can also cause chronic gastrointestinal bleeding, intermittent abdominal pain and anemia (9,10). A case of entero-enteric intussusception caused by splenosis has also been reported in the literature (3). These implants may mimic malignancy in healthy patients, as seen in our case, or peritoneal metastases in cancer patients.

In our case, the patient's splenosis was the result of childhood trauma that caused splenic rupture and she was currently found to have intestinal lesions mimicking malignancy during cesarean section. As the patient was not so young, and the intestinal masses were seen to be firmly attached to the bowel wall with irregular margins, a primary malignancy or metastasis was suspected among the differential diagnosis. The patient had no previous symptoms such as intermittent abdominal pain or bleeding.

It is impossible to predict which patients will develop the splenosis after the splenic trauma. The time of rupture or damage of the spleen and the amount of blood in the peritoneal cavity are not related with the number of implants. The symptoms are the clue. When the splenosis is diagnosed incidentally in a symptomatic patient, the complete surgical removal is not indicated. However this surgery is recommended when there is intermittent abdominal pain, or the diagnosis is uncertain as in our case.

Experimental evidence suggests that the presence of an intact spleen suppresses the growth and development of splenic implants (11).

Following splenectomy, splenules may replace some of the "housekeeping" and immunologic functions of the spleen, but even

patients with documented splenosis should be considered functionally hyposplenic. While in most cases splenules cause no symptoms, splenosis must be considered in the differential diagnosis of previously splenectomized patients who present with unexplained masses or occult bleeding. In a patient with a history of splenectomy, splenosis can act and provide the function of the spleen and thus should not be routinely excised.

However, in a previous case report, exploratory laparotomy revealed numerous splenic implants along the small and large bowels, some of which had apparently eroded through the bowel mucosa and bled (11). Excision of these penetrating lesions prevented further bleeding. An incidentally noted renal cell cancer was also resected. As presented in this case, symptomatic lesions are preferred to be excised.

Patients with both a history of splenectomy and intermittent abdominal pain should be scanned first with abdominal CT. Barium studies for suspected intramural lesions, SPECT, technetium-99m (Tc-99m) sulfur colloid scintigraphy, or with Tc-99m heat-damaged red blood cells may also be performed to confirm the diagnosis, thereby eliminating the need for surgery in these patients (2). However, as done in our case, an incidental bowel mass suspected of a malign lesion may deserve resection for at least to put a correct diagnosis.

In conclusion, we described a case of incidental intestinal splenosis during cesarean section, masquaring malignancy, leading to bowel resection. The current study aims to raise the awareness of splenosis so that it may be appropriately recognized and differentiated from malignancy to avoid further extensive treatment.

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