Spontaneous splenic rupture without trauma: A case report

Mürşit Dincer, Ahmet Kocakuşak, Gamze Çitlak, Ekrem Ferlengöz, Muzaffer Akinci

ABSTRACT

Spontaneous splenic rupture is a rare ill-defined clinicopathological entity and occurs in only 1% of all splenic ruptures. It occurs usually as a result of splenic infiltration by infectious or hematological diseases. We present a case of 36-year-old female who was admitted to our emergency department with a three-hour history of acute onset abdominal pain and dyspnea. There was no history of trauma and infectious or hematological diseases. Considering the hemodynamic instability an emergent laparotomy was performed. During laparotomy, a 5-cm splenic laceration was found and a splenectomy was performed. The histology report confirmed that there was no pathological cause of splenic rupture.

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CASE REPORT

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Keywords: Acute abdomen, Atraumatic splenic rupture, Splenectomy

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INTRODUCTION

Spontaneous splenic rupture is a life-threatening abdominal emergency. Spontaneous splenic rupture without a history of trauma is very uncommon [1]. It occurs in only 1% of all splenic ruptures. Atraumatic splenic rupture usually occurs due to infectious, hematological, or malignant infiltration of spleen [2]. Its etiology and management are unclear [3]. Nonetheless, emergency splenectomy is the standard treatment for patient with spontaneous splenic rupture [4].

CASE REPORT

A 36-year-old female was admitted to our emergency department with a three-hour history of acute onset abdominal pain and dyspnea. There was no history of trauma and infectious or hematological diseases. On examination, her pulse was 88/minutes with systolic blood pressure 85/60 mmHg, oxygen saturation of 95%. There was guarding over the left hypochondrium and epigastrium. Initial blood tests showed hemoglobin of 7.8 g/dl, hematocrit of 23.9% with normal coagulation profile. Abdominal sonography showed presence of free fluid around the spleen. Computed tomography scan confirmed the peri-splenic hematoma (Figure 1). The

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Figure 1: Contrast enhanced computed tomography scan showing the perisplenic free fluid and hematoma.

patient was monitored in our clinic. Intravenous fluids and empirical antibiotics were given. A total of two units of red blood cells were given. Repeat blood tests showed hemoglobin of 7.5 g/dl, hematocrit of 23.3%. Considering the hemodynamic instability and persistent pain, surgical intervention was decided. Laparotomy revealed 3000 cc of blood in the abdomen and a 5-cm splenic laceration were found. During the surgery a total of three units of red blood cells and three units of fresh frozen plasma were given. A splenectomy was performed. She was discharged with no problem on day-4. The histology report confirmed that there was no pathological cause of splenic rupture.

DISCUSSION

Spontaneous splenic rupture occurs mostly in a spleen due to infectious hematological or malignant infiltration. Spontaneous splenic rupture without a history of trauma is an uncommon entity. This serious clinical event which warrants immediate intervention is mostly in the form of operative surgery to save life [2, 5]. In spite of that, it has been reported in literature that a less invasive approach as proximal splenic artery embolization may be a safe, successful therapeutic alternative in selected patients [6].

CONCLUSION

In conclusion, spontaneous splenic rupture without a history of trauma is an uncommon life-threatening

abdominal emergency. The pathogenesis of the disease remains unclear. In patients with atraumatic left hypochondrial pain and low hemoglobin, splenic rupture should be kept in mind.

Author Contributions

Mürşit Dincer – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Ahmet Kocakuşak – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Gamze Çitlak – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Ekrem Ferlengez – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Muzaffer Akinci – Analysis and interpretation of data, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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