

# Spontaneous spleen fracture after laparoscopic apendectomy



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## Introduction

Idiopathic rupture of the spleen is a rare event, with a mortality rate of up to 12%. In 93% of cases this condition is related to underlying pathologic conditions.

It is already recognized that in 7% of the cases of atraumatic splenic rupture there is no identifiable cause.

Finally, a number of case reports have described splenic ruptures after laparoscopic surgery such as salpingectomie, Nissen fundoplication and repair of perforated duodenal ulcer. In the present report, we describe a case of a delayed idiopathic splenic rupture following an laparoscopic appendectomy.

## Case report:

Female, 54-years-old, is admitted to the emergency room with right iliac fossa pain and nausea.

The Computed Tomography confirmed an acute appendicitis and the patient underwent a laparoscopic appendectomy.

Three days after the surgery the patient developed generalized abdominal pain with hipovolemic shock and a drop of 5 g/dL of serum hemoglobyn.

The CT-Scan revealed active bleeding confined within the splenic capsule and a parenchymal laceration involving segmental arterys.

The patient underwent e mergency open splenect omy after four blood unit s were transfused.

She had an uneventual post-operatory recovery and was discharged, clinically improved, at the 3rd day post-splenectomy.

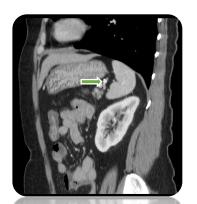






Image 1: Day 1 CT- Scan.



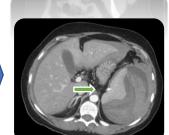




Image 2: Pre-operative CT-Scan.

#### Discussion:

The need for a splenectomy is exceptional and usually not considered by the surgeon in the post-operative period of an appendectomy.

The traction forces transmitted to the spleen at the induction of the pneumoperitoneum trough the splenic ligament or the presence of peculiar adhesions between the spleen and the colon may favour ruptures.

In our case the patient had no surgical history and the histologic analysis revealed a normal spleen. During the second intervention the presence of intra-peritoneal adhesions was also ruled out.

# Conclusion:

Since the appendectomy was the only event associated with the splenic rupture and, because the rupture occured only three days after the surgery, it is unlikely that the two events were not realted.

Idiopathic splenic ruptures are rare but should be remembered as a potential source for postoperative haemorrhage with no obvious ethiology.

#### Bibliography

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