Case Report

Laparoscopic Splenectomy Due to Splenic Injury after Colonoscopy

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Abstract

Colonoscopy, which is routinely performed in diagnosis and treatment of colorectal disorders, is a reliable procedure. Its most frequent complications are bleeding and perforation. Splenic rupture is a very rarely met complication of colonoscopy, and delay in its diagnosis leads to increased morbidity and mortality. We presented a 69 years old female patient, who was diagnosed by computerized abdominal tomography, performed for her abdominal pain, which started following the colonoscopy. After 15 days of medical treatment and follow-up, laparoscopic splenectomy was performed one month after her colonoscopy. The patient was discharged on her 4th postoperative day, with uneventful recovery. In patients who have complaint of abdominal pain following colonoscopy, an intraabdominal pathological condition should be considered and computerized abdominal tomography should be performed. If there is no detected intraperitoneal bleeding, in other words, if there is a sub-capsular hematoma of the spleen, medical management by monitoring the vital signs may be preferred. Then, splenectomy should be performed at an appropriate time.

Keywords: Laparoscopy, splenectomy, colonoscopy

Introduccional

Colonoscopy, which is performed in the diagnosis and treatment of colorectal disorders, is a quite reliable procedure. Its most frequent complications are bleeding and perforation. These complications become more frequent with the addition of a polypectomy to the colonoscopy procedure [1]. Extracolonic and visceral organ injuries such as appendicitis and pneumothorax are rare [2]. Splenic rupture is a very rare complication following colonoscopy. Its incidence is 1-21/100,000 and the first case was reported in 1974 [3, 4]. In the literature, the number of cases reported until now is just over 100 [5]. Although complaints develop within a few hours following colonoscopy in most of the patients, delay in diagnosis is quite common and this situation leads to increased morbidity and mortality [4, 6]. Splenic rupture is diagnosed by computerized tomography, following medical history of colonoscopy, presence of sudden-onset left upper quadrant abdominal pain, left shoulder pain, and reduced hemoglobin level. We report a case of splenic rupture following colonoscopy, treated with urgent splenectomy.

Case Report

A 69-year-old female patient underwent diagnostic colonoscopy for sigmoid colonic wall thickening, identified by computerized abdominal tomography in another medical center (Figure 1). The procedure was performed under intra-
venous sedation (midazolam 5 mg iv). According to the information obtained from the patient, she was discharged from the hospital following her observation in the recovery room for approximately 2 hours. One week later, the patient was admitted to the emergency service with abdominal pain at her left lower and left upper quadrants. Her physical examination revealed diffuse tenderness, which was more significant at her left upper and lower quadrants; signs of peritoneal irritation were absent. Her P-A chest radiogram and plain abdominal radiogram did not show any sign of free air. Computerized abdominal tomography showed sub-capsular 15 x 10 sized hematoma of the spleen. She was admitted to the hospital for observation, considering that it was a post-colonoscopy sub-capsular splenic hematoma (Figure 2). During follow-up, no pathologic changes were observed in her vital signs. On the 3rd day of her hospitalization, one unit of packed red blood cells was transfused due to her decreased hemoglobin value. Her renal functions improved, following fluid treatment. After observation in the hospital for 15 days, she was discharged. Her computerized abdominal tomography, performed at 3rd week, revealed the ongoing presence of sub-capsular hematoma (Figure 3). Her surgery, which had been postponed due to her comorbid disorders, was performed by laparoscopic splenectomy one month later, and she was discharged on her 4th postoperative day, with uneventful recovery.

**Discussion**

Splenic injury following colonoscopy is very rare. This condition may be explained by either the incidence of splenic injury being very low or the complications being left unreported [2]. We have had approximately 20 years of clinical experience with colonoscopy until now and we had no case with post-colonoscopy splenic injury. Therefore, we suggest that the incidence of splenic injury following colonoscopy is very low.
Splenic injury following colonoscopy is seen very rarely. Suspicion, in especially patients with abdominal pain following the procedure, is quite important for early diagnosis. Computerized tomography is very important for diagnosis.

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References