**Pericardial effusion following esophageal variceal sclerotherapy**

Mushtaq Ahmad Khan, S A Zarger, Gul Javid, B A Khan, G N Yattoo, A Shah, G M Gulzar, J S Sodhi

Department of Gastroenterology, SKIMS, Soura, Srinagar, Kashmir 190 011

We report a 37-year-old man with portal cavernoma who developed pericardial effusion two weeks following sclerotherapy for esophageal varices. It responded to conservative management. [Indian J Gastroenterol 2006;25:37]

Endoscopic sclerotherapy for the treatment and prevention of variceal bleeding is associated with a variety of complications, some of which may prove fatal. Minor complications include chest pain, temporary dysphagia, fever, and minor pleural effusion. More serious complications include esophageal perforation, broncho-esophageal fistula, respiratory distress syndrome and brain abscess.1

A 37-year-old man with portal cavernoma presented with retrosternal and interscapular pain associated with low-grade fever and shortness of breath. The patient had undergone esophageal variceal sclerotherapy two weeks back. Endoscopy had revealed two columns each of grade 3 and grade 2 varices. These were injected with a total of 10 mL of 3% ethoxysclerol at multiple sites intravariceally with free-hand technique. The post-procedure period was uneventful and the patient was discharged.

On re-admission, he had distended non-pulsatile neck veins, radial pulse of 110 beats/min, blood pressure 100/60 mmHg with pulsus paradoxus of 20 mmHg and respiratory rate of 28/min. Cardiac examination revealed dull percussion note in the left second intercostal space; apical impulse could not be appreciated. Heart sounds were muffled. There were no added cardiac sounds. Abdomen was soft; hepatomegaly (3 cm below right costal margin in the mid-clavicular line) and shifting dullness were present.

**Investigations:** Hemoglobin 10.4 g/dL; total leucocyte count 12.6 x 10⁹/mm³; bilirubin 2.4 mg/dL; ALT 300 U/L; total protein 7.0 g/dL; albumin 3.5 g/dL; normal kidney function tests and sterile blood cultures. Chest radiograph revealed cardiomegaly and minimal left pleural effusion. Electrocardiogram showed low voltage and tachycardia. Ultrasonography showed enlarged liver, dilated hepatic veins, thick-walled gall bladder, portal cavernoma, splenomegaly and ascites. Echocardiograph revealed moderate pericardial effusion. Ascitic fluid analysis revealed few lymphocytes and serum-ascitic albumin gradient of 2.1. Culture of the fluid was sterile.

The patient was managed with bed rest, salt restriction and parenteral antibiotics. However over a period of 4-5 days, ascites increased, patient developed edema feet and shortness of breath. CT scan of thorax and abdomen revealed moderate pericardial effusion, bilateral pleural effusion and moderate ascites. Pericardial wall thickness was 2 mm. Patient showed improvement in dyspnea after ascitic fluid was drained. Blood pressure increased, edema feet subsided, and the patient was discharged after 2 weeks.

Literature on pericardial effusion following esophageal variceal sclerotherapy is limited to case reports. The exact pathogenesis is not known. Esophageal varices occur in the lower two-thirds of the esophagus, which is in close proximity to the pericardium. Thin long needles whose depth cannot be guarded or monitored pierce the varix wall or the paravariceal tissues during injection of sclerosant. The adjoining pericardium may be injured directly, or the sclerosant may seep into the pericardium, or the inflammatory process may extend to the pericardium from the esophagus.2

This inflammatory process occurring in the pericardium may be subclinical or self-limiting, presenting as mild substernal pain following the procedure. Cases of cardiac tamponade requiring pericardiocentesis1 or pericardiectomy,3 and pericarditis responding to conservative treatment have been described.4

**References**


**Correspondence to:** Dr M A Khan, Assistant Professor, Department of Gastroenterology, SKIMS, Srinagar 190 011. E-mail: drmushtaqkhan@hotmail.com

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**Laparoscopic jejuno-jejunostomy for afferent loop stasis following truncal vagotomy with posterior gastro-jejunostomy for pyloric stenosis**

M Rangarajan, C S Subramanian, T A Chandraalathan, G Senthilkumar

Department of Surgery, Rajah Muthiah Medical College and Hospital, Annamalai University, Annamalainagar 608 002

A 47-year-old man presented with epigastric pain relieved by bilious vomiting since one month. He had undergone truncal vagotomy with posterior gastroje-