

SHORT COMMUNICATION

Surgical Indication in Schistosomiasis Mansoni Portal Hypertension - Follow-up from 1985 to 2001

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The study had the objective to evaluate the benefits of surgical indication for portal hypertension in schistosomiasis patients followed from 1985 to 2001. Schistosoma mansoni eggs were confirmed by at least six stool examinations or rectal biopsy. Clinical examination, abdominal ultrasonography, and digestive endoscopy confirmed the diagnosis of esophageal varices. A hundred and two patients, 61.3% male (14-53 years old) were studied. Digestive hemorrhage, hypersplenism, left hypochondrial pain, abdominal discomfort, and hypogonadism were, in a decreasing order, the major signs and symptoms determining surgical indication. Among the surgical techniques employed, either splenectomy associated to splenorenal anastomosis or azigoportal desvascularization, esophageal gastric decompression and esophageal sclerosis were used. Follow-up of patients revealed that, independent on the technique utilized, a 9.9% of death occurred, caused mainly by digestive hemorrhage due to the persistence of post-treatment varices. The authors emphasize the benefits of elective surgical indication allowing a normal active life.

Key words: schistosomiasis mansoni - portal hypertension - surgical indication - evolution - esophageal varices

Schistosomiasis mansoni is a widespread parasitic disease which could have about 3% of hepatosplenic form and 100,000 patients affected by portal hypertension (Kelner 1992). The development and causative factors of the hepatosplenic form were widely discussed by Klöetzel (1964) but remains as an actual theme for discussion. According to Bina (1995), the severe forms are dependent either on the failure of specific treatment and successive reinfections. Moreover, it has been also related to the parasitic load and also to genetic factors from host (Prata 1992, Bina 2001). Interested on the clinical aspects of hepatosplenic form of schistosomiasis mansoni, Coura and collaborators have followed, since 1973, patients from Capitão Andrade, municipality from Vale do Rio Doce, in Minas Gerais, where a ratio of 5.6% of severe form has been detected (Coura et al. 1992, Conceição & Borges-Borges-Pereira 2002). Despite the fact that in schistosomiasis the portal hypertension is the main morbid element, the surgical treatment of portal hypertension in schistosomiasis patients has distinct features when compared with cirrhotic patients, mostly because hepatic function is preserved in liver schistosomiasis.

A total of 102 hepatosplenic patients, aging from 14 to 53 years old, with a male predominance (61.3%), coming from Capitão Andrade (n = 26), and from different regions of the country (n = 76) as outpatients were derived to the Serviço de Doenças Infecciosas e Parasitárias from the Hospital Universitário, UFRJ, a referral hospital for schistosomiasis. They were examined and submitted to laboratorial examinations: six stool examinations (Kato-Katz method), and when negative, a rectal biopsy. Abdominal ultrasonography, digestive endoscopy, functional hepatic tests and sorology for viral detection (HCB and HCV) were done. The main criteria used for surgical indication were: digestive hemorrhage due to esophageal varices rupture, hypersplenism, pain and abdominal discomfort, and hypogonadism. Patients were submitted to the following surgical procedure: splenectomy associated to splenorenal anastomosis (n = 39), or associated to azigoportal desvascularization (n = 37), esophageal gastric decompression (n = 26), and esophageal sclerosis (n = 26). During the surgery fragments of liver and spleen were obtained and processed for histological study. Patients were followed from 1985 to 2001. The main surgical indications were: digestive hemorrhage caused by rupture of esophageal varices, hypersplenism, pain and abdominal discomfort, and hypogonadism. About 5% of patients have discontinued the clinical attending, 9.9% of the patients died because of rebleeding due to the persistence of esophageal varices. There was no significative difference between the surgical procedure employed (Mann-Whitney test).

Kelner et al. (1982), in an evolutive study (25 years) including 358 schistosomiasis mansoni, hepatosplenic

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patients with a previous digestive hemorrhage observed a death ratio of 11.4% after rebleeding. However, at this time, sclerotherapy was not employed. The authors did not detect deterioration of the hepatic function. In our cases, we had four patients with a macronodular cirrhosis caused by hepatitis B virus (Conceição et al. 1998). Ferraz (2001) showed a rebleeding rate of 14.4% and mortality of 5.4%, in a series of patients submitted to splenectomy and division of the left gastric vein, after 30 months of follow-up. The author suggests this type of surgery as the surgical option to the treatment of bleeding due to the rupture of esophageal varices. The benefits of splenectomy were emphasized by Silveira (1980), although its inefficacy when used alone has been shown (Raia et al. 1985). The same risk of rebleeding was encountered when comparing the ligation of esophageal varices alone with patients submitted to a splenorenal anastomosis (Kelner 1992).

Our study emphasize that regardless of the surgical procedure, the same rate of death occurs as a consequence of rupture of esophageal varices. And further that, our death rate is similar to the majority of series described.

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