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Results of the Pathology of Spleen in 1492 Patients Undergoing Splenectomy

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Abstract

Spleen is a major component of the reticuloendothelial system and functions as a filtering system for the encapsulated bacteria especially in children. Knowing the spectrum of conditions leading to splenectomy in any geographic area is important to decrease the number of unnessesary splenectomies. Here we report the causes of splenectomy in three major general referring hospitals in Shiraz, the capital of Fars province in southern Iran.

Introduction

Spleen is a major component of the reticuloendothelial system and functions as a filtering system for the encapsulated bacteria especially in children. Many systemic diseases, neoplasms, infections, cysts, trauma and hematologic diseases might cause a a need for splenectomy. Knowing the spectrum of conditions leading to splenectomy in any geographic area is important to decrease the number of unnessesary splenectomies. Here we report the causes of splenectomy in three major general referring hospitals in Shiraz, the capital of Fars province in southern Iran.

Patients and methods

We studeid the cause of splenectomy in three major general referring hospitals in Shiraz, Fars provenience, south of Iran. In total the results of pathologic specimen from 1492 cases undergoing splenectomy during the 1980-1999 period was reviewed.

Results

Among 1429 cases, the four major causes of splenectomy were trauma in 463 cases (30%), with an average age of 25 years and seventy eight percent being male. B thalassemia major in 339 (23%) of cases with an average age of eleven years,

lymphoma/leukemia in 12% of patients and finaly cirrhosis in twelve percent of patients with the average age in the cirrhotic group being higher as compared with the other causes (37 years) (Table 1).

Miscellaneous causes of splenectomy were immune thrombocytopenia and hydatid cyst each causing splenectomy in 2% of cases. Another miselaneous cause was the surgery for stomach or esophagus in 90 and 53 of cases respectively. Other miscellaneous causes are shown in table 2.

Discussion

There were four major causes of splenectomy among our cases namely trauma, B thalassemia, lymphoma or leukemia, and finally cirrhosis.

Splenectomy might be considered as a hazard to patients regarding its early and late life thereatming septic complications. The risk of septicemia is 166 times more for these patients as compared to the general population (1,2). This surgery causes some patients to become none-responder to the routine vaccines, which indicates that this procedure actually compromises human immune system and even long term antibiotic therapy hav been recommended for thalassemia and sickle patients after splenectomy (3,4).

Considering the four major causes of splenectomy among our patients trauma to spleen should be handled with a conservative surgery and controlling the underlying hematological disorders should be performed to save the spleen and avoid splenecotmy if possible (5,6).

Even in the hydatid cyst of spleen, which is a

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large group (31 cases) in our series, surgery can be done with sparing the spleen.

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