

## Portal Cavernoma in Children: A Retrospective Study of Surgical and Medical Management.

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### Introduction:

Portal cavernoma is the consequence of chronic occlusion of the extrahepatic portal venous system, characterized by the formation of a network of dilated veins through which hepatopetal portal blood flows. In children, it represents a major cause of portal hypertension (PHT).

Umbilical catheterization during the neonatal period is a common etiology of portal cavernoma.

The aim of this study is to report our clinical experience in the diagnosis and management of portal cavernoma.

### Materials:

This is a retrospective study conducted from 2002 to 2025, including children diagnosed with portal cavernoma who underwent surgical management in our department.

### Results:

Twenty-one cases were included.

The mean age was 7.5 years (range: 2 to 14 years).

The main reason for hospitalization was signs of portal hypertension (PHT), observed in 15 cases, followed by cholestatic jaundice in 2 cases and pancytopenia in 4 cases.

A history of umbilical catheterization was noted in 66.7% of the cases.

Abdominal Doppler ultrasound confirmed PHT in all patients.

Endoscopic examination revealed the presence of esophageal varices in every case.

The most common laboratory abnormality was pancytopenia. A thrombophilia workup was ordered for all patients but was completed in only 14; it was normal in 13, while the 14th patient showed decreased protein S and C levels along with a heterozygous Factor V mutation.

Portography was performed in all patients who underwent surgical shunting, with a mesenterico-Rex shunt in 13 cases, a mesenterico-caval anastomosis in 6 cases, and a splenorenal anastomosis in 2 cases.

Postoperative outcomes were uneventful, and patients are being followed regularly in outpatient clinic.

### Conclusion:

Portal cavernoma is a debilitating condition in children that requires a multidisciplinary approach.

The etiological workup should include screening for prothrombotic disorders as well as investigation of a history of umbilical catheterization during the neonatal period.



**Fig. 1: CT angiography showing Portal Cavernoma.**



**Fig. 2 : Phlebography**