

PW 1.14

DISTAL SPLENORENAL SHUNT SURGERY IN THE MANAGEMENT OF PORTAL VEIN THROMBOSIS (PVT) SECONDARY TO CAVERNOUS TRANSFORMATION OF PORTAL VEIN (CTPV) IN THE PEDIATRIC POPULATION: EXPERIENCES FROM VICENTE SOTTO MEMORIAL MEDICAL CENTER, CEBU CITY

MAYMONA J. CHOUDRY¹, THEO GENESIS M. TAGAYTAY¹, JONATHAN G. NAVARRO¹
¹Department of General Surgery, Vicente Sotto Memorial Medical Center

Introduction

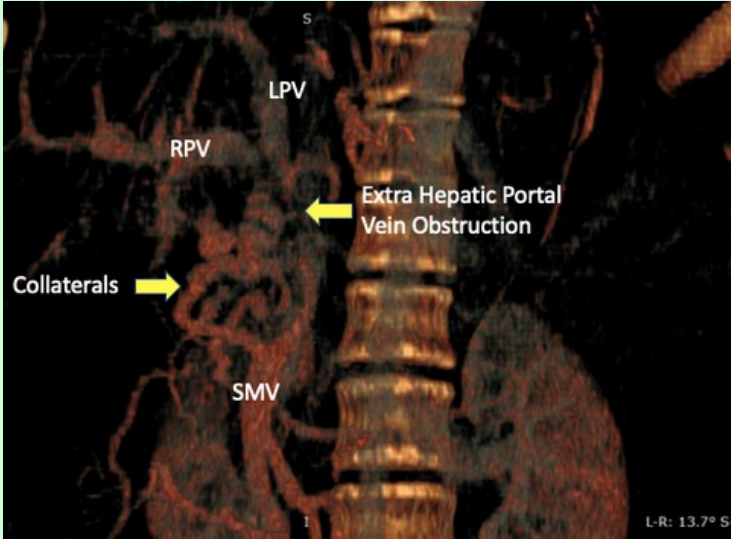
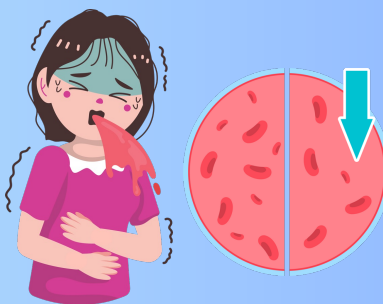
- In the pediatric population, the cavernous transformation of the portal vein (CTPV) is a sequela of extrahepatic portal vein thrombosis which is the most common cause of portal hypertension.



- Four patients with upper gastrointestinal bleeding.

- CT Scan revealed a cavernous transformation of the portal vein particularly at the periportal region, with multiple reactive para-aortic, Inter-aortocaval & mesenteric lymphadenopathy and splenomegaly.

Case Report



Perioperative Clinical Outcomes of the Pediatric Patients				
	Patient #1	Patient #2	Patient #3	Patient #4
Endoscopic Management	Rubber Band Ligation of Esophageal Varices (CHH, 10/12/2021)	None	None	None
Length of Surgery (HH:MM)	09.26	07.20	10.45	03.40
Blood loss (cc)	150	-	200	100
Post-Op ICU	Yes	Yes		Yes
Postoperative Complications	None	None	None	None
Re-admission	+	+	-	+
Re-bleeding	Yes	Yes	-	-
Re-intervention rate	-	-	-	-
Mortality rate	-	-	-	-

- One of these cases was managed with rubber band ligation (RBL), however, the patient was still symptomatic.
- Three of these cases were managed with distal splenorenal shunting using Warren's technique (Figure 2), and one with Meso-Rex shunting (Figure 1).
- Postoperatively (Table 1), these patient's symptoms and condition improved.

Case Discussion

- Management includes endoscopic therapy with band ligation for temporary hemostasis in acute variceal bleeding, but it cannot reduce portal hypertension.
- Surgery is indicated in selected cases.
- Distal splenorenal shunt (DSRS) has been shown in most published series to have a therapeutic efficacy with a low incidence of 5-8% of recurrent variceal bleeding, acceptable risk of 5-15% of hepatic encephalopathy, and excellent long-term survival rates.

Figure 1

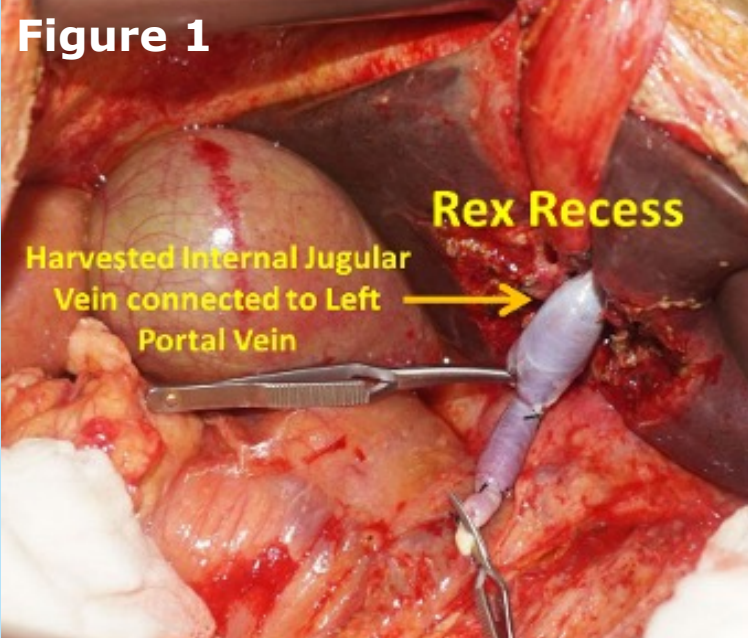
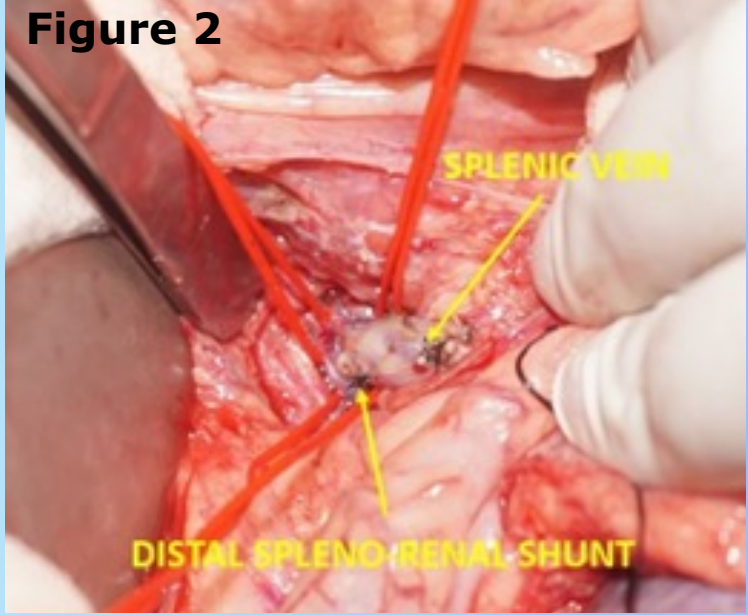


Figure 2



Conclusion

- Surgical diversion in these patients showed improvement in symptoms of portal hypertension.
- For institutions in low to low-middle-income countries that lack endoscopic procedures for pediatric patients, surgery should be the primary option in the management of portal hypertension secondary to extrahepatic portal vein thrombosis.

