

PORTOSYSTEMIC SHUNT SURGERY AT PERIPHERY: CHALLENGES AND OUTCOMES

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Introduction

- Extra hepatic portal venous obstruction (EHPVO) is the most common cause of pediatric portal hypertension.
- Cases come from remote background with limited access to health and need proper addressal.
- We analyzed the Challenges and outcomes of Porto systemic shunts in a peripheral setup

Study Design

- Prospective study

Methods and Materials

- 8 consecutive children below 12 years operated with a diagnosis of EHPVO formed the study group.
- All were operated on the basis of
  - Clinical findings,
  - Presence of hypersplenism and
  - Documented portal vein thrombosis on Doppler ultrasound.
- All the cases were done under 2.5 magnification using instruments from the general surgery department
- Custom made needle tip monopolar cautery was used as the only energy device. (Fig 1)
- Results with respect to shunt patency and rebleed were collected. Problem encountered with respect to assistance, blood loss, operating time, vascular anastomosis were recorded based on scoring system. (Table 1)

Table 1. Scoring system for the assessment of problems

Parameter	Criteria's	Score
Assistance	Good	3
	Satisfactory	2
	Poor	1
Blood Loss	< 100ml	3
	100-200 ml	2
	>200ml	1
Operating Time	<3 hour	3
	3-6 hour	2
	>6 hour	1
Vascular Anastomosis	Easy	3
	Manageable	2
	Difficult	1

Results

- N= 8
- Upper gastrointestinal endoscopy could be done in four cases.
- Lienorenal shunt (LRS) was performed in all because of massive splenomegaly with infarcts and uncertain follow up
- Age range: 4-12 years(Mean: 6 years)
- Follow-up range =3 to 12 months
- All the cases had a patent shunt at last follow up
- Mean operating time = 4.30 hours (Range 4- 6 hours).
- Mean stay: 5 days (Range 4-6 days).



Figure 1. Custom made needle tip cautery. The only energy device used

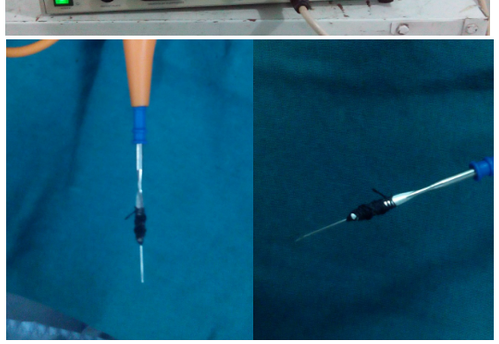


Figure 2. Operative collage showing spectrum of cases

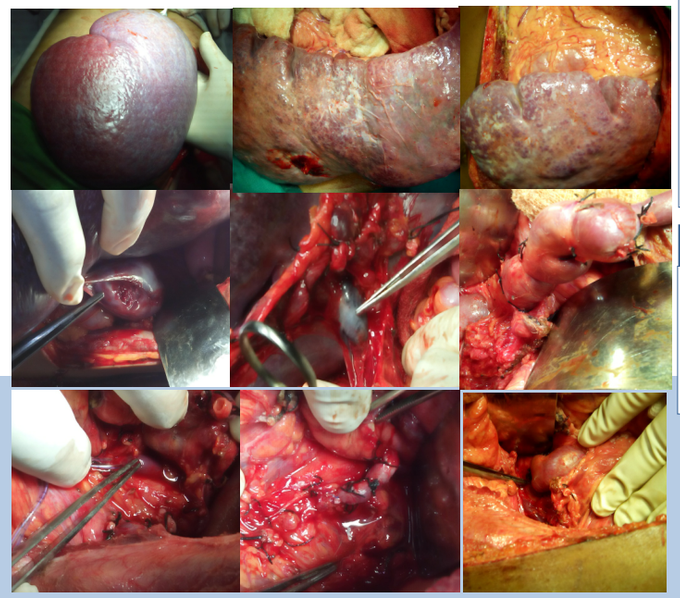
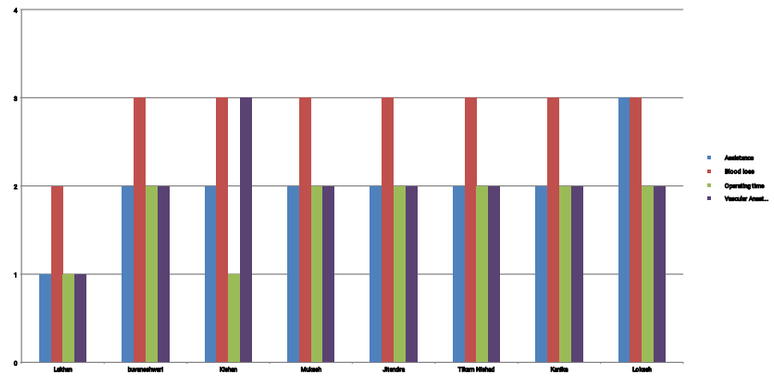
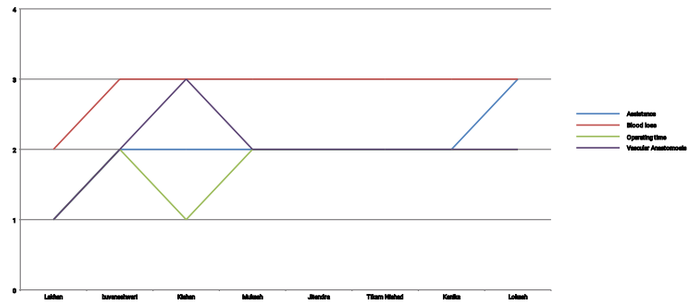


Chart I and Chart II: Assessment of operative difficulties .





Challenges

- High incidence of sickle cell disease and secondary portal hypertension
- Poor access to health care facilities
- Lack of initiatives
- Poor follow up
- Need of one time solution
- Instruments
- Energy source

Conclusions

- Porto systemic shunting is a viable option.
- Repeated hospital visit is reduced with one time surgery.
- This can be performed even in limited facilities with minimal assistance