



8TH - 10TH NOVEMBER, 2024 | GRAND HYATT MUMBAI

Registration number: **322**

Title of the presentation:

**PERCUTANEOUS TRANSHEPATIC APPROACH TO PORTOSYSTEMIC SHUNT
PROCEDURE FOR ACUTE VARICEAL HAEMORRHAGE**

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Clinical Details

BRIEF HISTORY

- 55 year old Male
- Chronic Alcoholic
- Complaints of acute variceal hemorrhage
- MELD Sodium Score: 16
- No known comorbidities
- Diagnosed as a case of Liver Cirrhosis with Portal Hypertension

LAB PARAMETERS

| Hemoglobin | 10.2 |
|--------------------|----------|
| Platelets | 1,40,000 |
| Total Bilirubin | 5 |
| Direct Bilirubin | 1.8 |
| Indirect Bilirubin | 3.2 |
| INR | 1.3 |
| Serum Creatinine | 1.1 |
| Sodium | 138 |

Plan of Management:

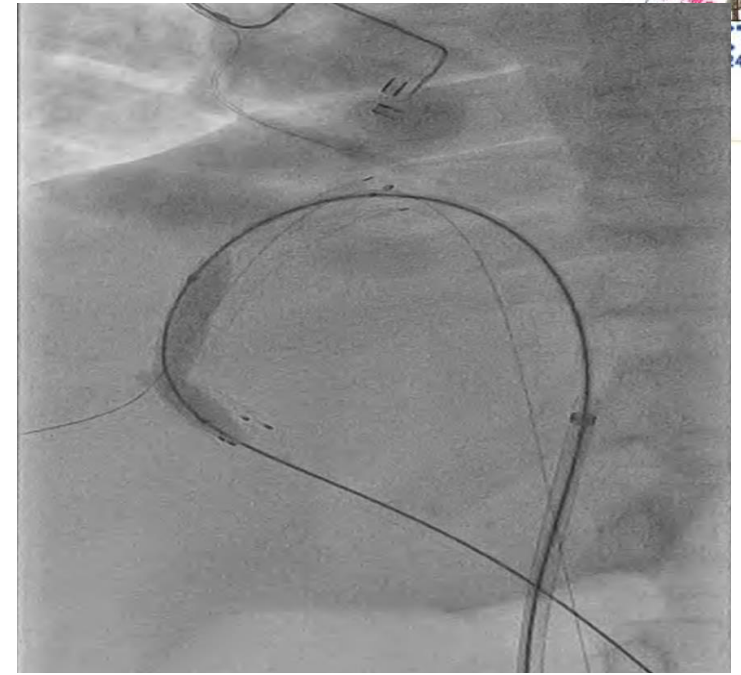
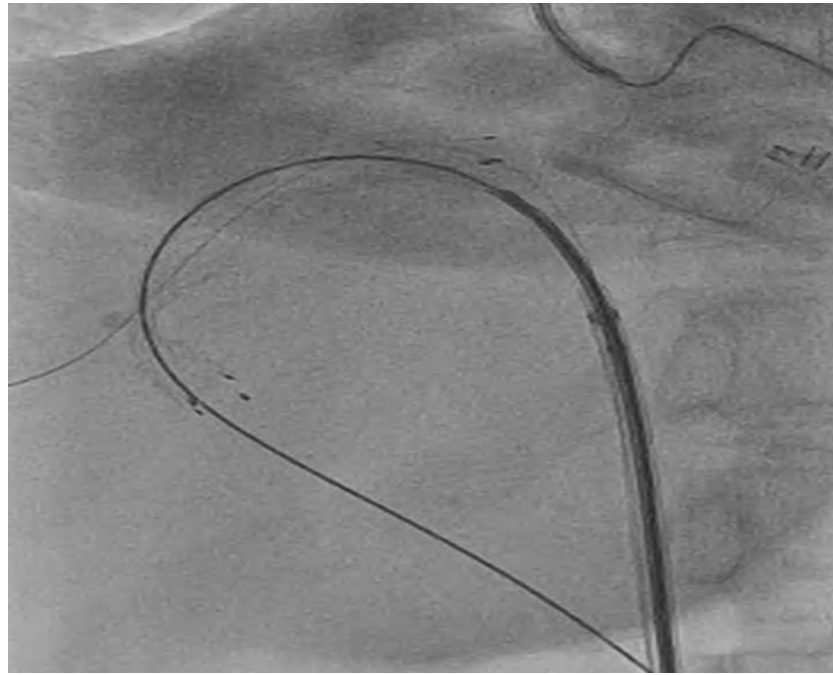
- Patient was planned to undergo Trans jugular Intrahepatic Portosystemic Shunting (TIPSS).
- On table USG for Jugular assessment revealed significant occlusion of bilateral IJVs and brachiocephalic veins with multiple surrounding collaterals.
- The plan for access had to be reassessed.
- Next Step??

CONSIDER PERCUTANEOUS
TRANSHEPATIC ACCESS

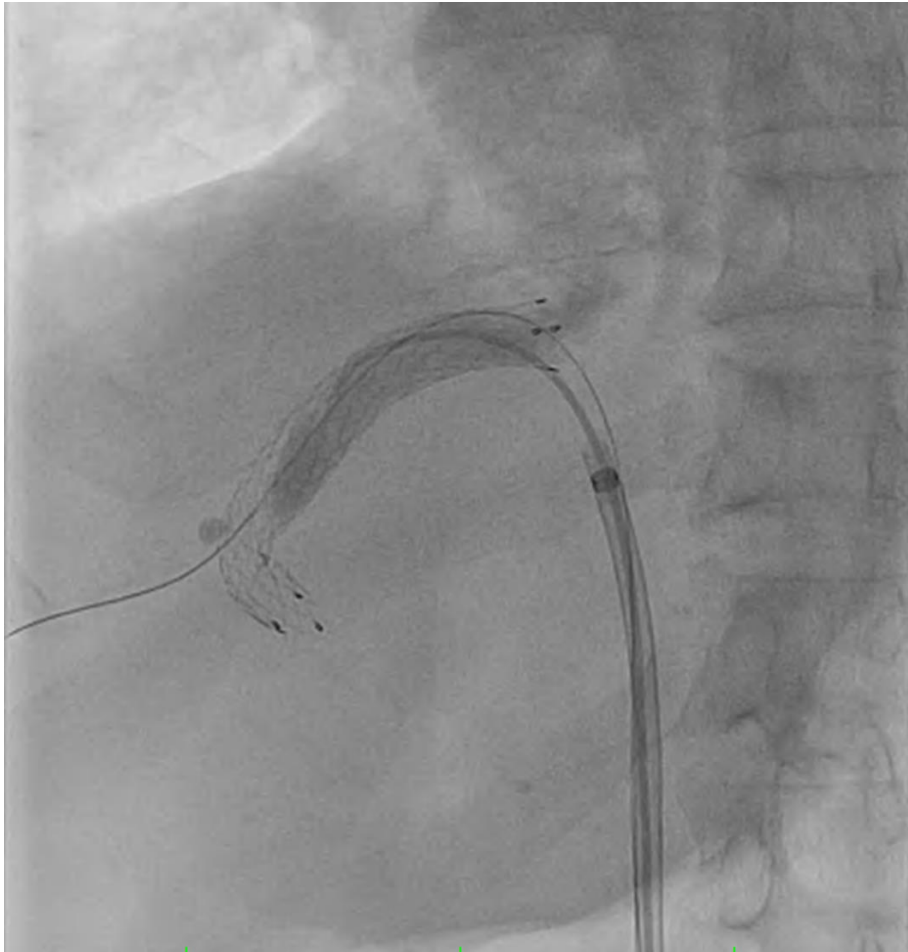
STEPS



- ❖ USG Guided puncture with 22 G Chibba Needle taken into the portal vein and confirmed on fluoroscopy.
- ❖ The needle was then advanced into the hepatic vein and the communication between the portal vein and hepatic vein confirmed on fluoroscopy.
- ❖ 0.018 wire was then passed through the needle and was snared in the IVC from left femoral vein access.



- ❖ Balloon dilatation of the tract done.
- ❖ 10 x 80 mm stent graft was deployed followed by balloon angioplasty at the site of narrowing.



❖ Post balloon DSA shows good flow across the stent.

HARDWARE USED

PUNCTURE:

- 21 G Chibba Needle
- 0.014 grand slam wire

FEMORAL ROUTE:

- Snare
- JR Catheter
- 4 mm Balloon (0.018 compatible) for tract dilatation
- 0.018 roadrunner wire
- 0.035 guidewire
- 10 Fr Long Sheath Braided ASD Moulin Sheath
- Amplatz Stiff Wire
- Fluency 10 x 80 mm Stent graft
- 8 mm Balloon (0.035 compatible) for post stenting plasty

FOLLOW UP:

- ❖ Resolution of variceal hemorrhage
- ❖ Good flow in stent at 2 months follow up on Ultrasound

Conclusion:

- ❖ Difficult access through the jugular vein for shunt creation should not deter the plans for creating a portosystemic shunt.
- ❖ Percutaneous transhepatic puncture of portal vein and hepatic vein could be achieved without the use of sophisticated instruments.
- ❖ Out of the box solutions might be useful in certain cases, however their use should be reserved for situations when nothing else could likely work.