Hybrid Laparoscopic Devascularization of Upper Stomach and Splenectomy (Hassab's Operation) for Severe Cirrhosis with Porto-Systemic Shunt

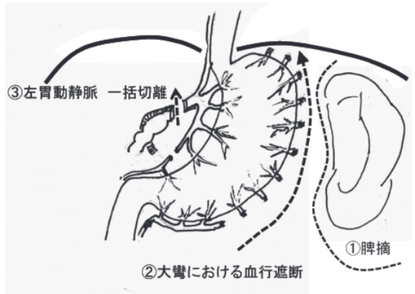
Background

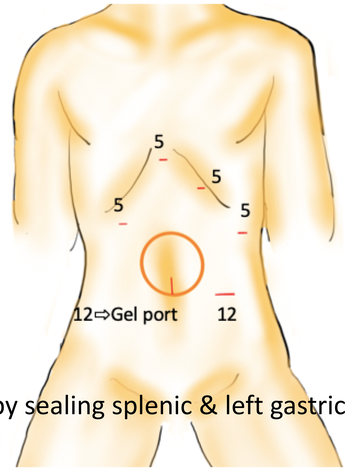
In modern times, endoscopic & IVR approaches has become mainstream Tx of esophagogastric varices associated with portal HTN by cirrhosis.

This is because surgical approaches, such as esophageal transection or selective shunt surgery, had high-risk post-op mortality.

However, it is reported that surgical approach can be effective in pts with severe esophagogastric varices refractory to non-invasive Tx.

Hassab Surgery



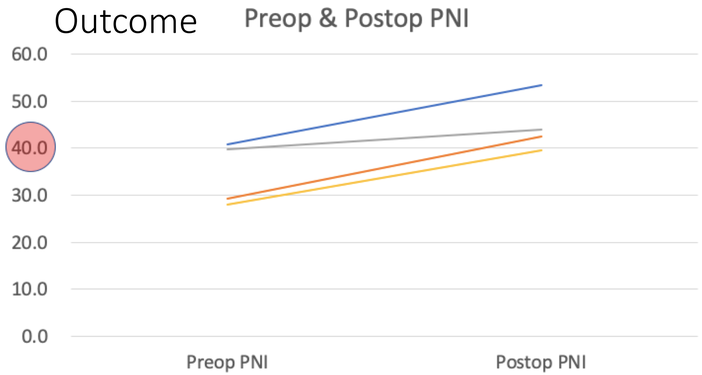


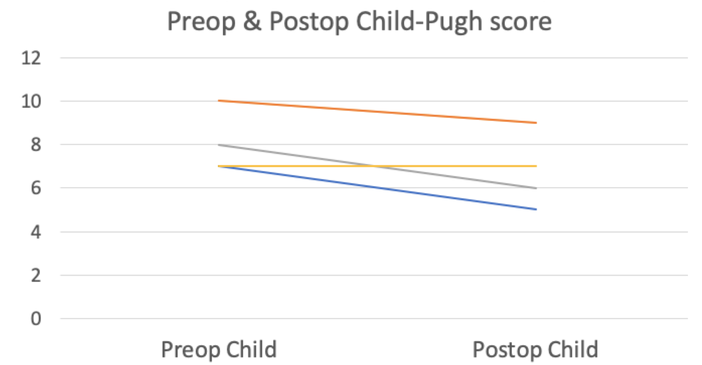
1.Tx for hypersplenism
2.Decrease the inflow to portal blood by sealing splenic & left gastric A
3.Decrease the outflow of portal blood

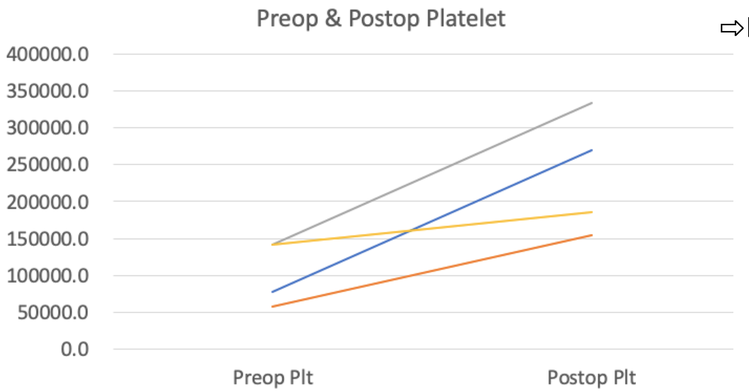
Baseline demographics&clinicopathological characteristics

	Median (range)
Age, median (range)	58(37 – 65)
Male	1
Female	3
Preop Child Pugh score	8(7-10)
Splenomegaly	4
Charlson index score	5 (very high)
Preop PNI	34.5(28.0-40.1)
Preop Plt	109,000(57,000-142,000)
Operation time	234 (180-484) min
Blood loss	1850 (250-3870)ml
Complication (Clavian-Dindo)	Grade II:2, Grade IIIa:1

Outcome







Postop Courses

	Median (range)
In-hospital stay	12 days (9 – 36)
Clavian-Dindo ranked over II	3 pts
Grade II	2 pts
Grade IIIa	(1) pts

- Clavian Dindo Class II: 2 cases
  Portal thrombosis
  ⇨Thrombolysis therapy (Urokinase I.V.)

- Clavian Dindo Class IIIa: 1 case
  Pancreatic fistula (DP was performed simultaneously)
  ⇨EUS-guided transgastric drainage

Discussion

Originally, Hassab operation was developed for Tx of esophagogastric varices associated with portal hypertension by cirrhosis.

However, this can also increase improve liver function, nutrition level, protein synthesis especially in pts with hypersplenomegaly.

W/o hypersplenomegaly, Hassab operation is less likely to improve liver function.

⇨Left gastric A is more attributed to the varices formation, rather than Splenic A, inflow of that causes Splenomegaly.

Conclusion

Considering high-risk of postop hemorrhage due to severe cirrhosis & progress of surgical devices, HALS Hassab operation is less complicated & safer procedure rather than other selective shunt procedures.

Especially for pts with portal HTN & hypersplenomegaly, the Hassab operation is useful not only in treating varices, but in improving liver function in cirrhotic pts, leads to improve pts' QOL.

HALS approach is less invasive than an open surgery, with better postoperative cosmesis, suitable for pts with severe cirrhosis & high ASA-PS score.