

RETROPERITONEAL LAPAROSCOPIC MEDIAN ARCUATE LIGAMENT DECOMPRESSION

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Introduction

Compression of the celiac artery associated with median arcuate ligament compression syndrome can result in aneurysms at the pancreaticoduodenal arcade. If the aneurysm ruptures, treatment with interventional radiology (IVR) is recommended. Subsequently, the median arcuate ligament (MAL) should be incised to prevent the recurrence of the aneurysm. However, it is often difficult to approach the root of Celiac artery (CA) by intraabdominal approach, as it is often located behind the pancreas, but they can be reached without any obstruction by retroperitoneal approach. Here, we introduce our methodology.

Materials and methods

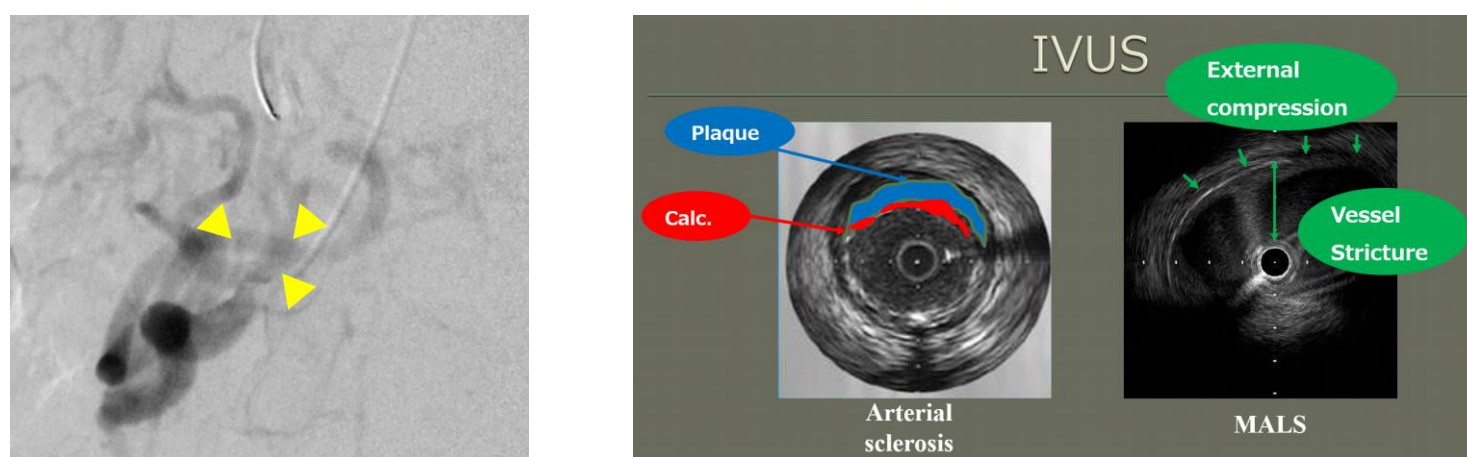
We performed 4 cases of laparoscopic retroperitoneal MAL incision. All of them were right lateral recumbent position, four port, retrorenal approach.

Case 2 was performed preoperative IVUS to confirm stricture.

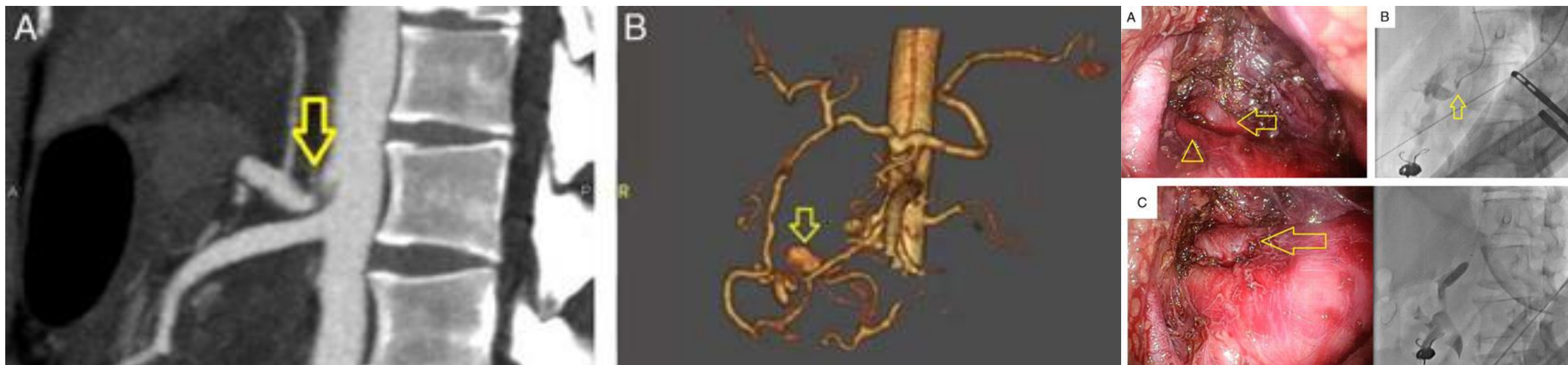
Case 4 was intraoperative IVR to find the location of celiac artery and simultaneous dilatation of stricture.

Case	Age	Sex	Aneurysm
1	67	M	PSPDA
2	54	F	ASPDA
3	65	M	ASPDA
4	44	M	PIPDA

Case 2



Case 4

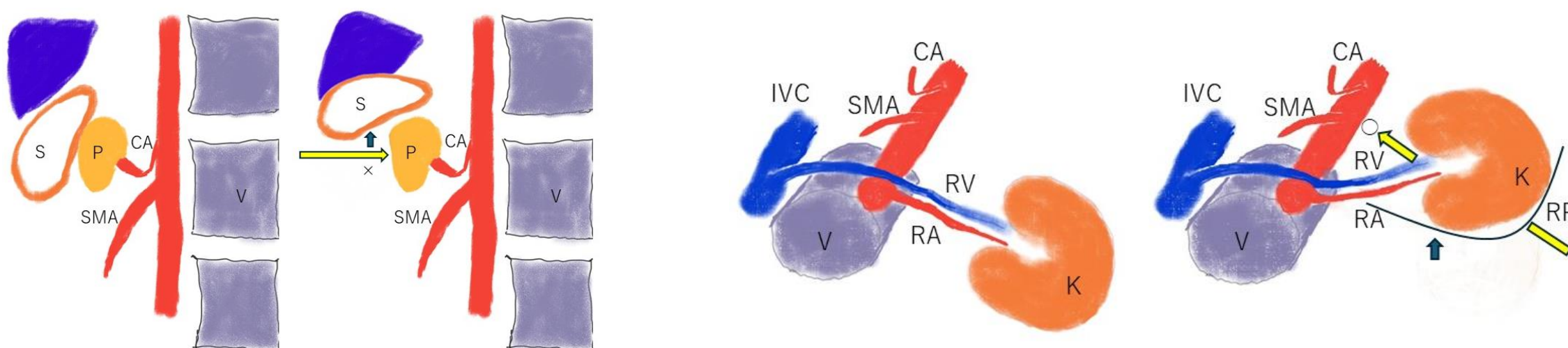


Results

The results showed no complications.

Discussion

Laparoscopic intraabdominal approach to MAL has technical difficulty. It is because MAL sometimes exist behind the pancreas. Instead of that retroperitoneal approach to MAL is easier way to access because of no obstructive organ exist on the way of it. However, there is few surgical landmark for retroperitoneal MAL incision. Therefore IVR during MAL incision is more feasible. Additionally, the retroperitoneal laparoscopic approach reduces the risk of adhesive bowel obstruction.



S:Stomach P:Pancreas CA:Celiac Artery SMA:Supra Mesenteric Artery V:Vertebra IVC:Inferior Vena Cava RV:Renal Vein RA:Renal Artery RP:Retroperionium

Conclusion

Retroperitoneal laparoscopic MAL incision is better than conventional intraabdominal way. And the operation with IVR methodology is more efficient to detect MAL.