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Segment VIII (SVIII) is the largest segment [median 26.1% (range 11 - 38%) of the total liver volume]. It is located between the middle and right hepatic veins, and usually two major portal pedicles feeding the ventral and dorsal subsegments of SVIII branch out from the trunk. Because of the absence of anatomic landmarks of segment VIII on the liver surface and complex portal branches to S VIII, segmentectomy VIII is technically demanding.

There are two methods: Non-anatomical resection and Anatomic resection. The patients who has superficial, small tumor in SVIII and impaired liver function and complex portal branch of anterior sector have undergone non-anatomical resection. However it is difficult to ensure a safe resection margin in large tumor and deeply located tumors. Anatomic resection is more technically demanding because of difficulty to determine the precise extent of resection, no standard operative technical details and complexity of the procedure.

Complete removal of the liver parenchyma fed by portal territory of SVIII should be called complete anatomical resection (Isolated SVIII resection), and after the complete resection the trunks of the middle and right hepatic vein appeared on the dissected surface. Complete control of portal territory of SVIII is the Key point of Isolated SVIII resection. 1985, Makuuchi reported 'Ultrasonically guided Subsegmentectomy' and Hu and Pierangeli performed isolated resection of Segment using intrahepatic glissonian approach.

Experience with laparoscopic procedures and recent advances in laparoscopic devices have increased laparoscopic liver resection. And recently laparoscopic liver resection in difficult location like S VII, VIII have reported. So Laparoscopic anatomic segmentectomy 8 using intrahepatic glissonian approach was possible.

Reference

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