Resection and reconstruction of the inferior vena cava for neoplasms

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Introduction

- Radical ‘en-bloc’ resection of the tumor and affected venous segment remains the only therapeutic option associated with prolonged survival
- Poor long-term prognosis and significant surgical risk associated with major vascular surgery
- The technical difficulties, especially when involved a segment above renal vein, makes it domain of liver surgeons

Results

- For the period 2005 – 2018: 45 patients (25 female)
- Average age 57.3 years
- Mean hospital stay 9 days (7-18)
- Perioperative morbidity 40% (18pts)
- Perioperative mortality 11% (5 pts)
  - Pulmonary embolism (n=2)
  - Coagulopathy (n=1)
  - MOF (n=2)
- Median follow-up 36 months
- 27 patients (60%) still alive
- 18 patients (40%) died of tumor recurrence
- 1 year OS 71.8%
- 5 year OS 17.5%

Distribution of complications according to Dindo-Clavien Classification

Etiology

- Retropertioneal - 12
- Primary leiomyosarcoma - 4
- RCC - 4
- Duodenal - 1
- NOC-M - 2
- CRC - M - 1
- Gallbladder - 1
- Cholangio - 4
- HCC - 4

Conclusion

Obtaining tumor-free margins is the only potential for cure. IVC resection can be performed safely, which expands the indications and increases survival in selected patients.