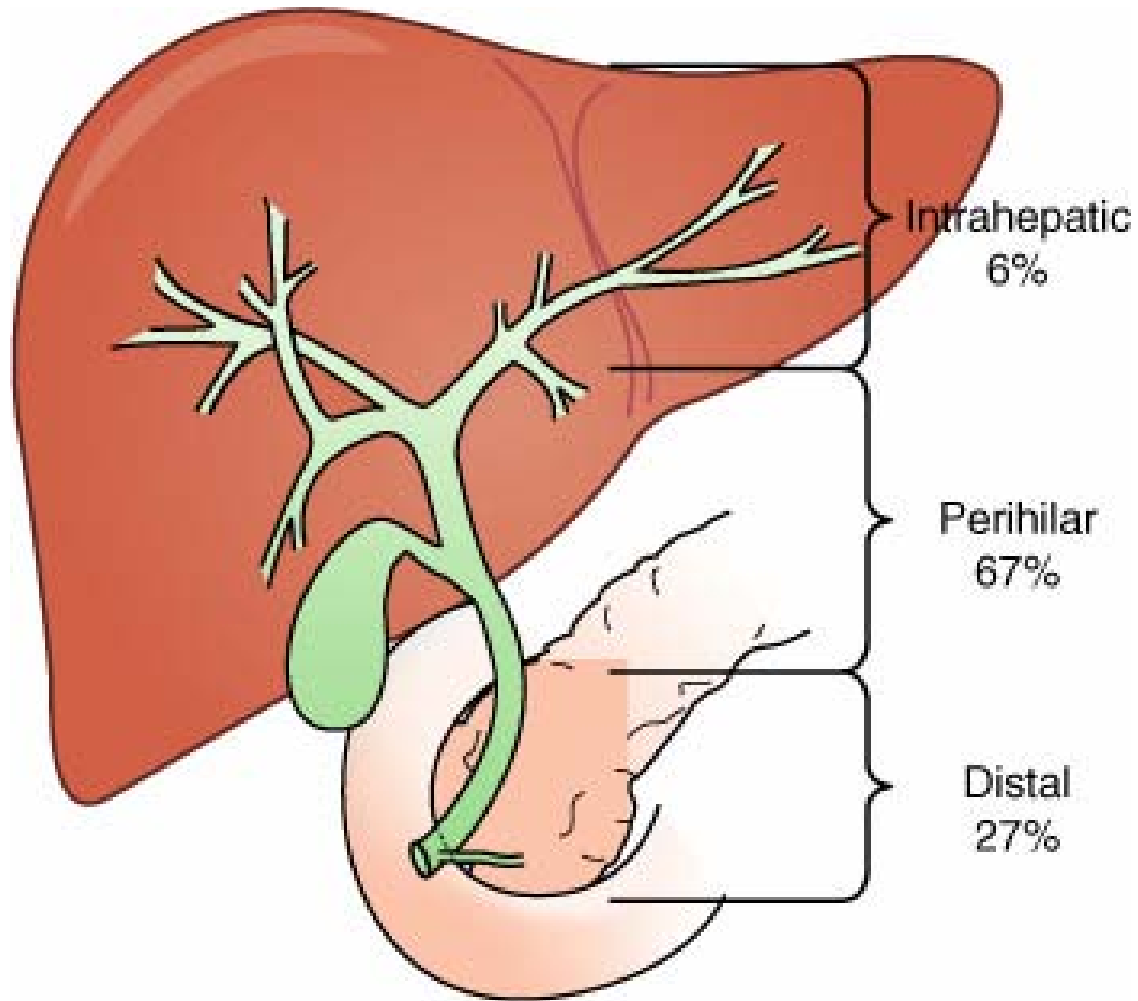
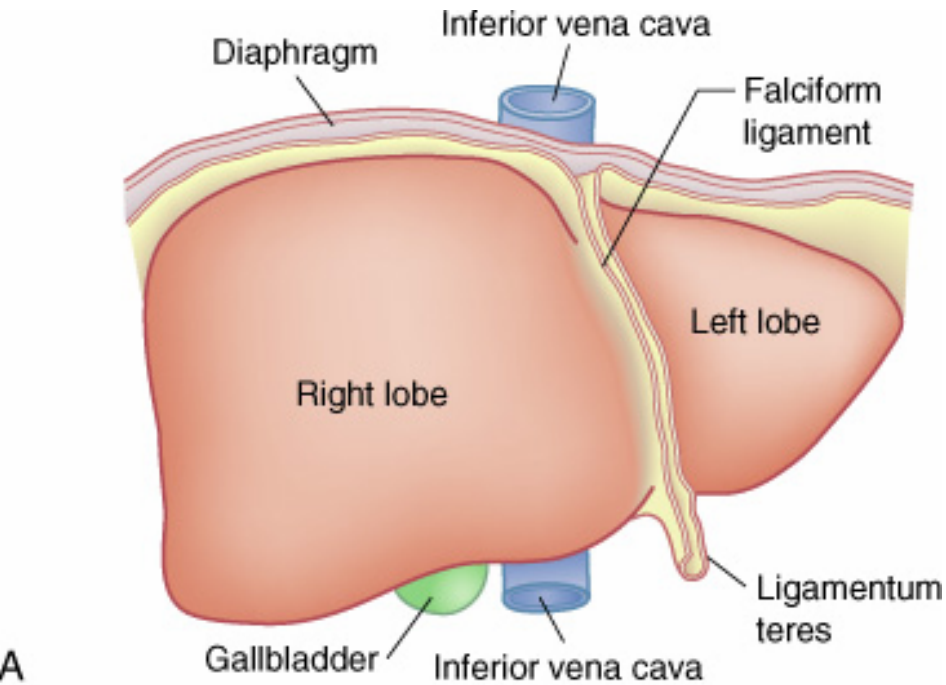


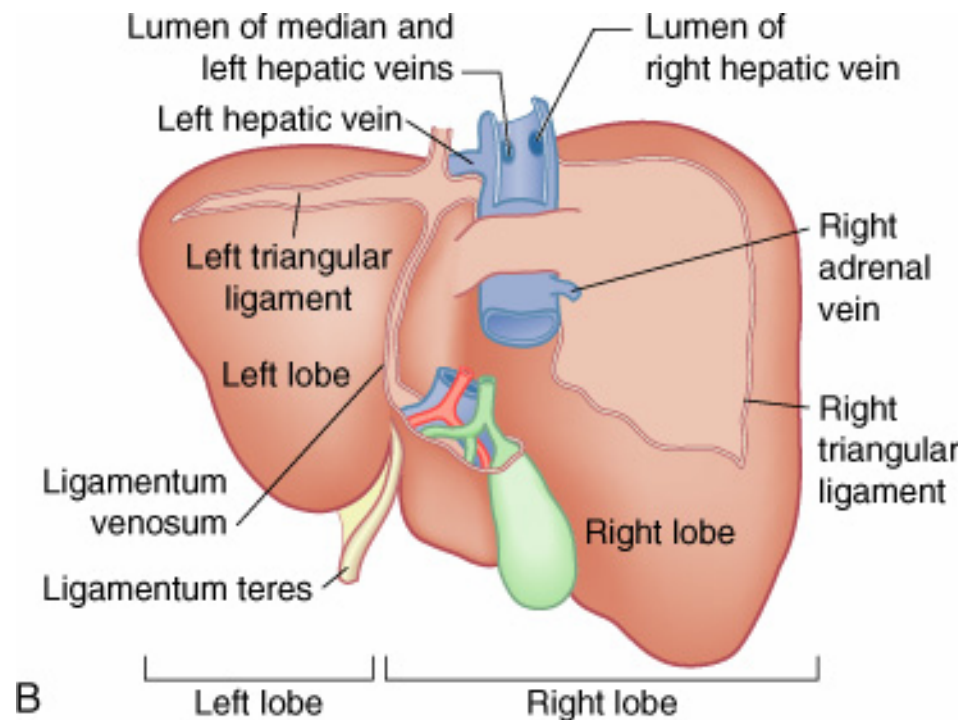
肝臟手術的介紹



肝臟的解剖

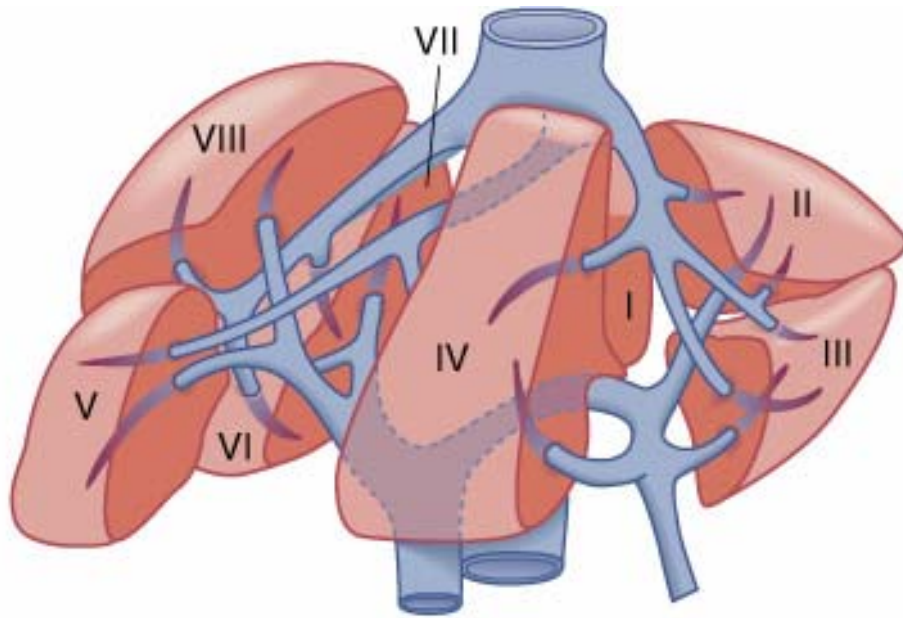


Copyright © 2004, Elsevier.

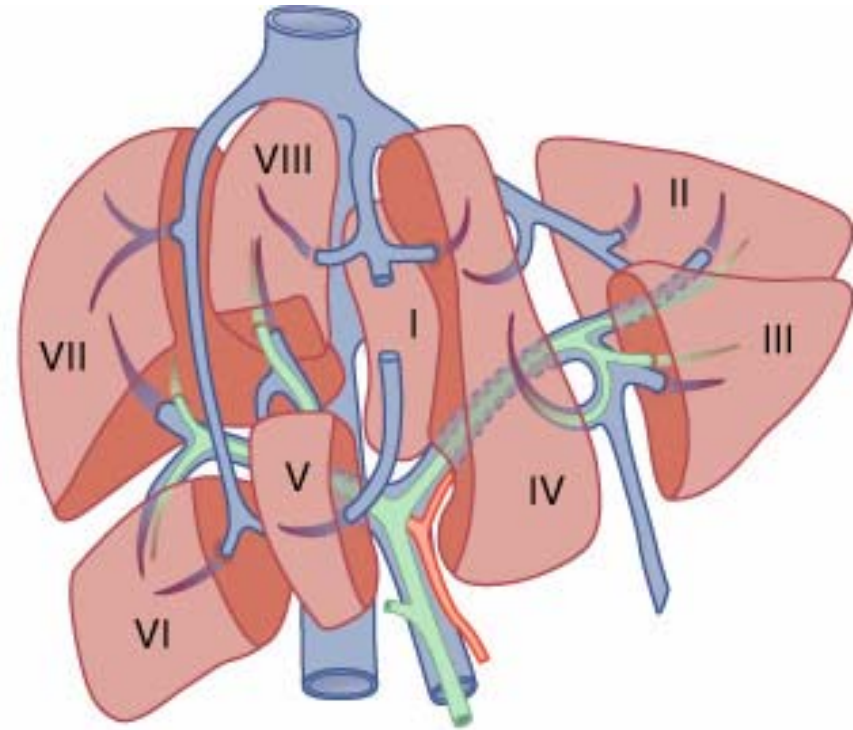


Copyright © 2004, Elsevier.

肝臟的解剖



Copyright © 2004, Elsevier.



B

Copyright © 2004, Elsevier.

Hepatocellular Carcinoma(HCC) 肝癌

- **Etiology:**

- Liver cirrhosis
- HBV, HCV
- Aflatoxin(*Aspergillus flavus*)
- Parasite(Liver fluke)
- Polyvinylchloride(PVC)
- Anabolic steroids
- Alpha1-antitrypsin deficiency

- **Pathology:**

- Nodular(clusters of nodules)
- Massive(single large mass)
- Diffuse(wide spread nodules)

- **Clinical:**

- No s/s in early stage
- BWL, weakness
- 10% rupture & bleeding
- Nontender hepatomegaly
- Splenomegaly, ascites

- **Diagnosis:**

- Laboratory: Hepatitis, AFP, liver function, ICG test
- Ultrasonography
- CT scan
- Hepatic angiography
- Needle biopsy

Hepatocellular Carcinoma(HCC) 肝癌

- **Treatment:**

- Only curative therapy: surgical resection
- Entail Lobectomy => anatomic segmentectomy
- Resection margin 1cm
- Liver transplantation
- TACE
- PEI (percutaneous ethanol injection)
- RFA (Radiofrequency ablation)
- R/T, C/T

- **Prognosis:**

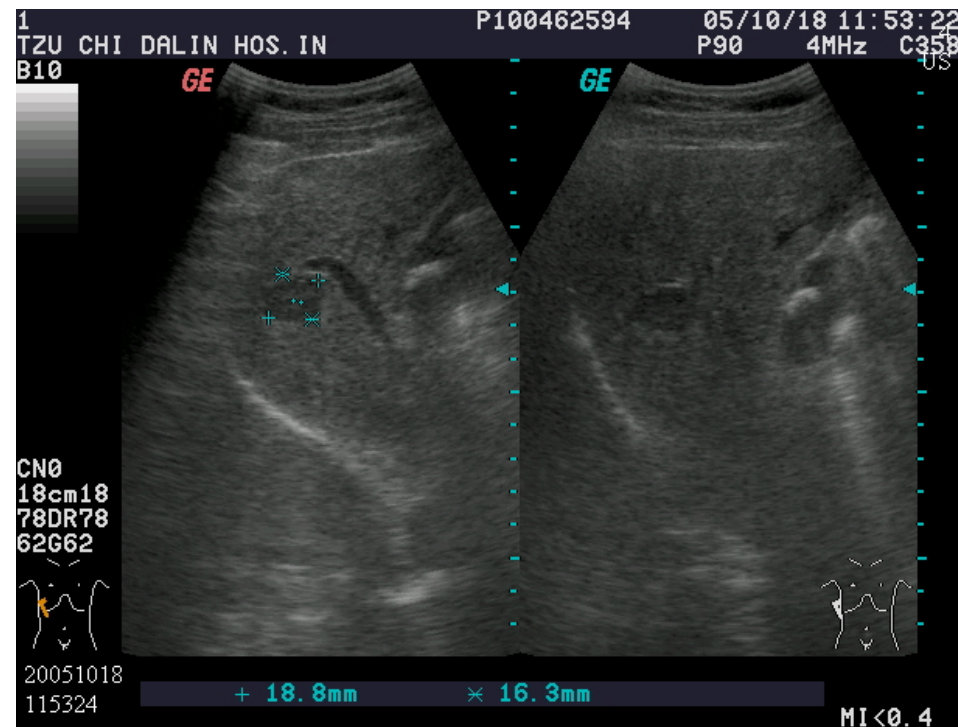
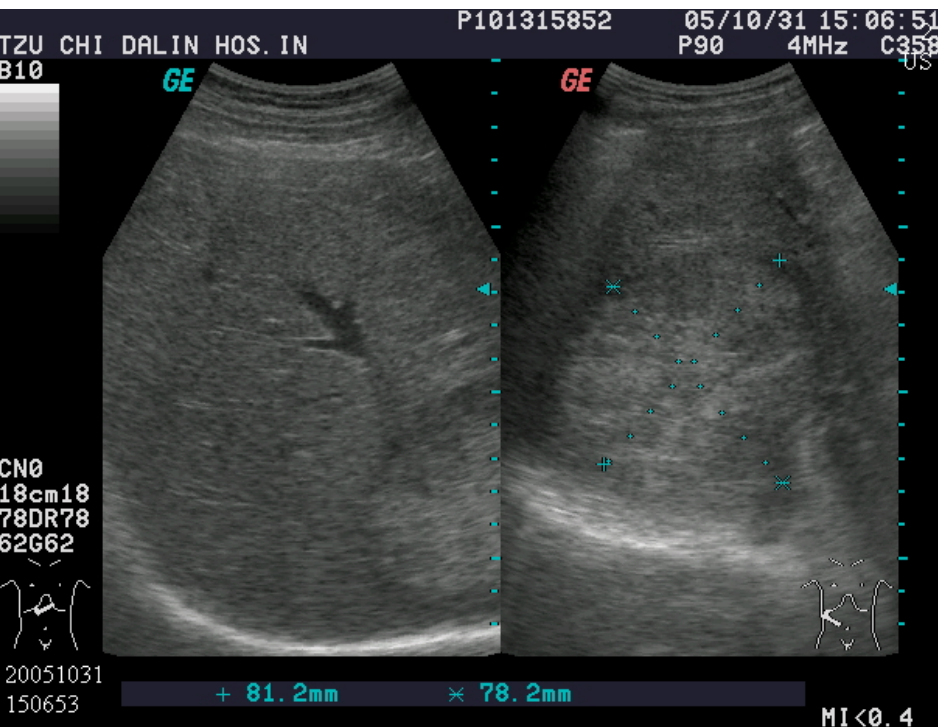
- Unresected HCC: poor, rarely survive beyond 4 months
- 5-year survival rate after curative resection: 25-30%
- Liver transplantation: similar to resection, higher cure rate for small HCC
- Fibrolamellar carcinoma: favorable prognosis

肝臟手術的介紹

- 手術前之評估: **Child(1964)-Pugh(1973)** 肝硬化程度之分級
- | 分數 | 1 | 2 | 3 |
|-------------------------|----------------|-------------------|------------------------|
| Encephalopathy | None | Grade 1-2 | Grade 3-4 |
| Bilirubin(mg/dl) | <1.5 | 1.5-2.0 | >2.0 |
| Albumin(mg/dl) | >3.5 | 2.0-3.5 | <2.0 |
| PT延長秒數 | 1-4 | 4-6 | >6 |
| Ascites | None | controlled | poor controlled |
- **Child's class A: 5-6分, Good risk(5% mortality)**
- **Child's class B: 7-9分, Moderate risk(31% mortality)**
- **Child's class C: 10-15分, Poor risk(76% mortality)**

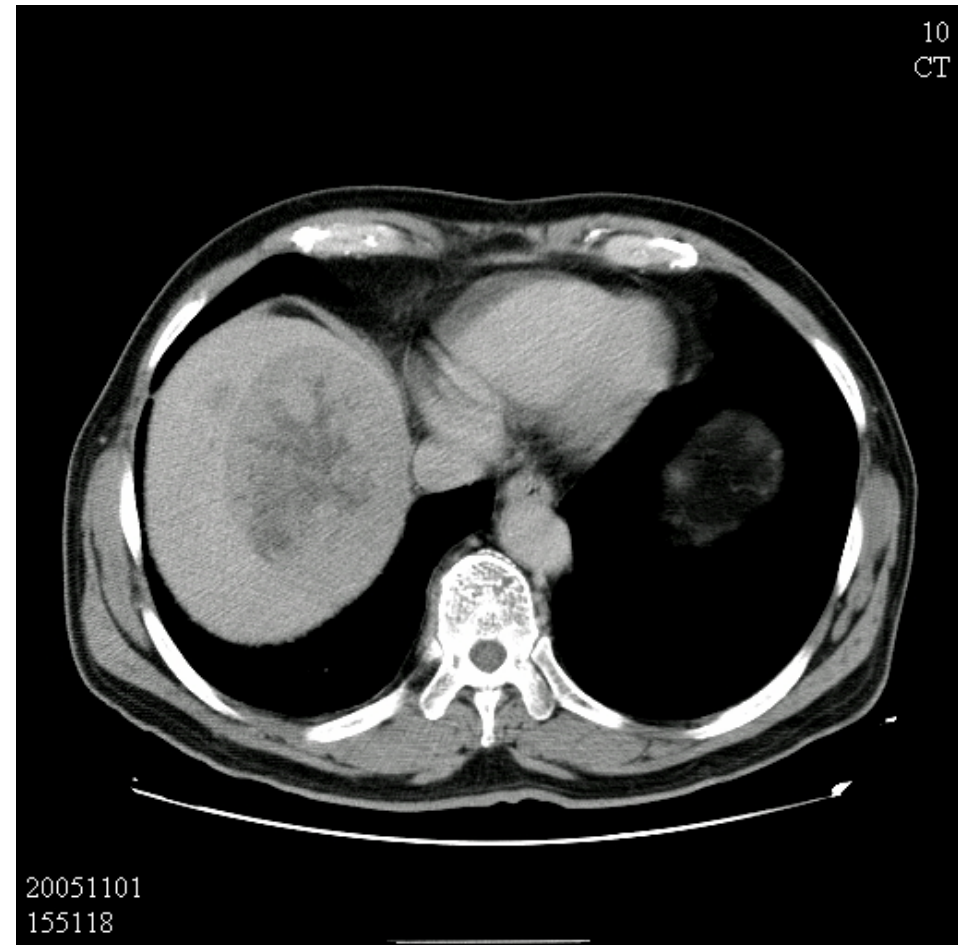
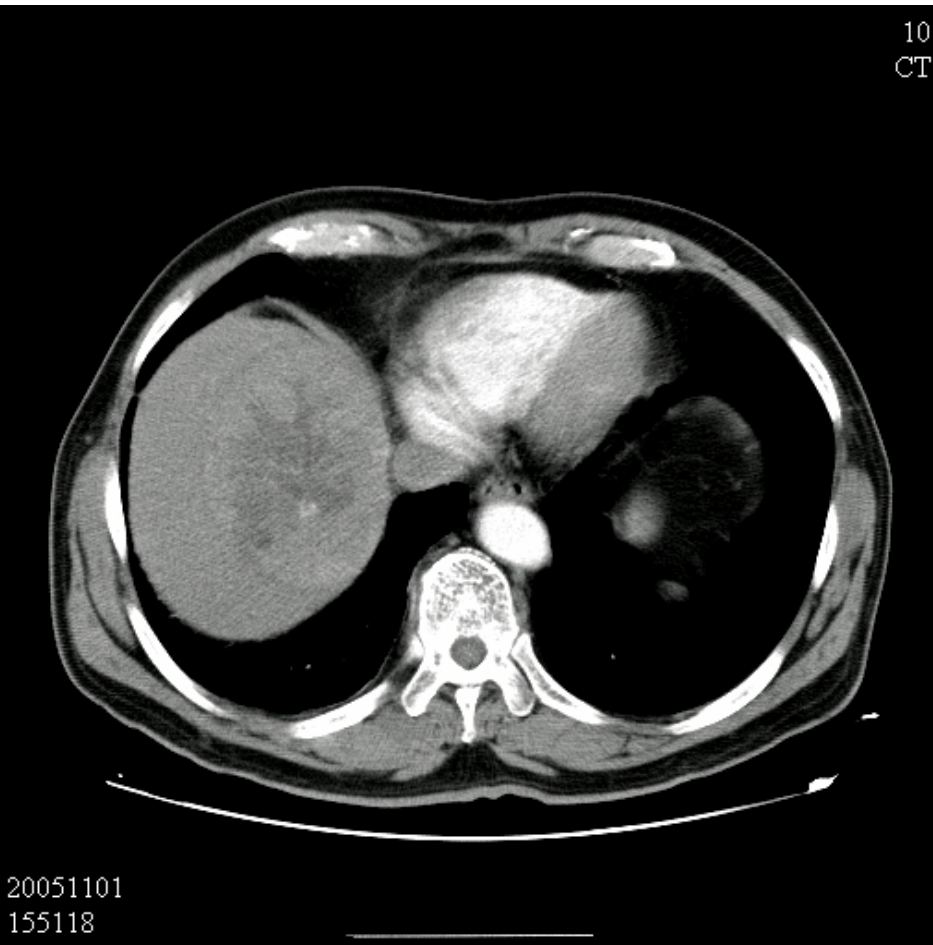
肝臟的影像檢查

Abdominal Sonography



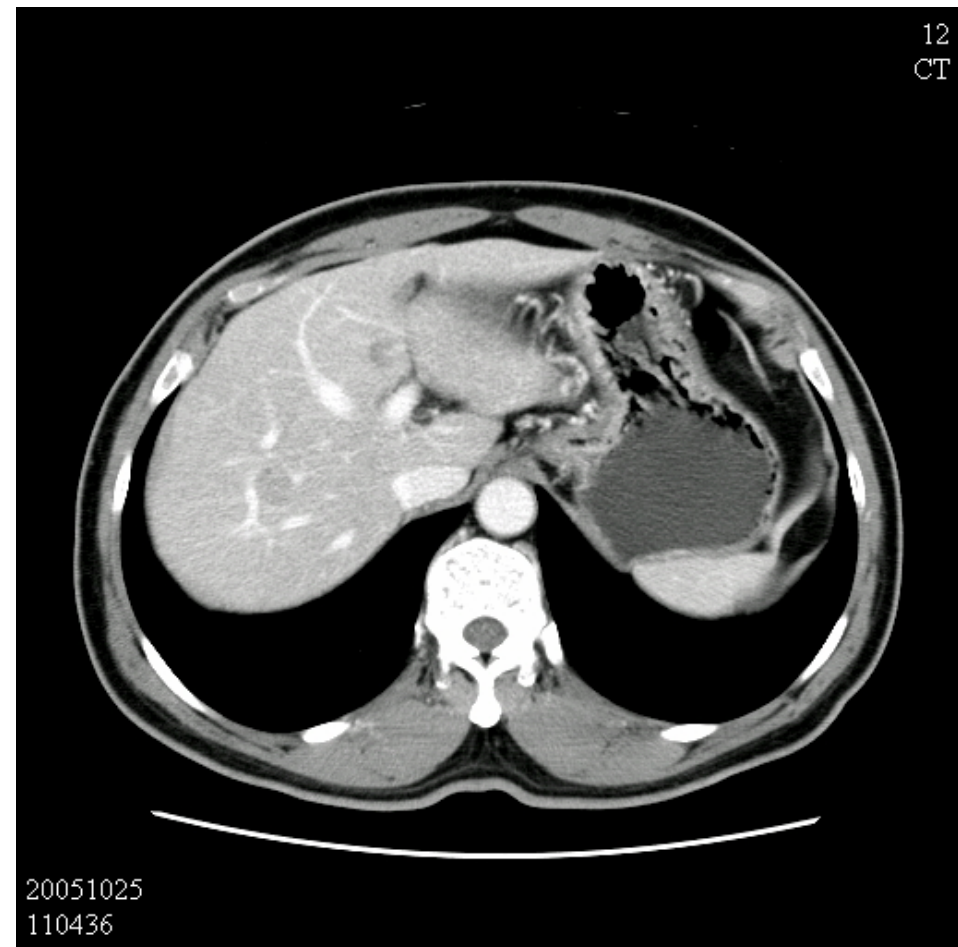
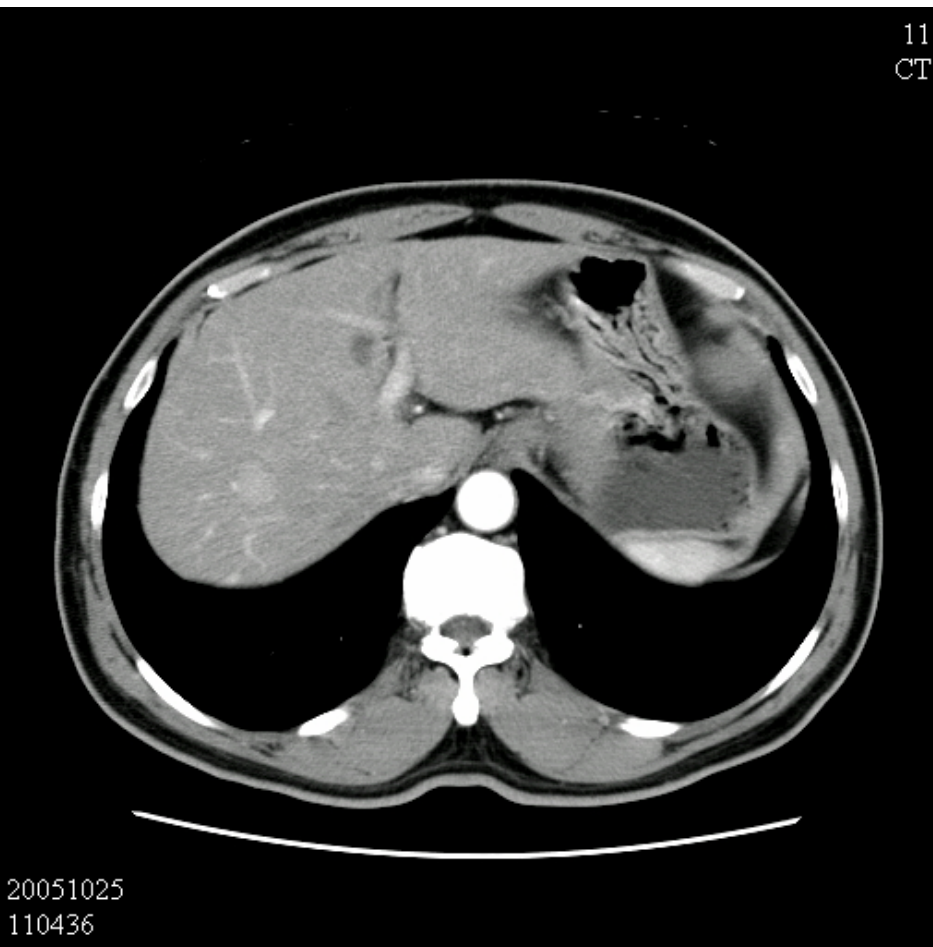
肝臟的影像檢查

Abdominal CT scan



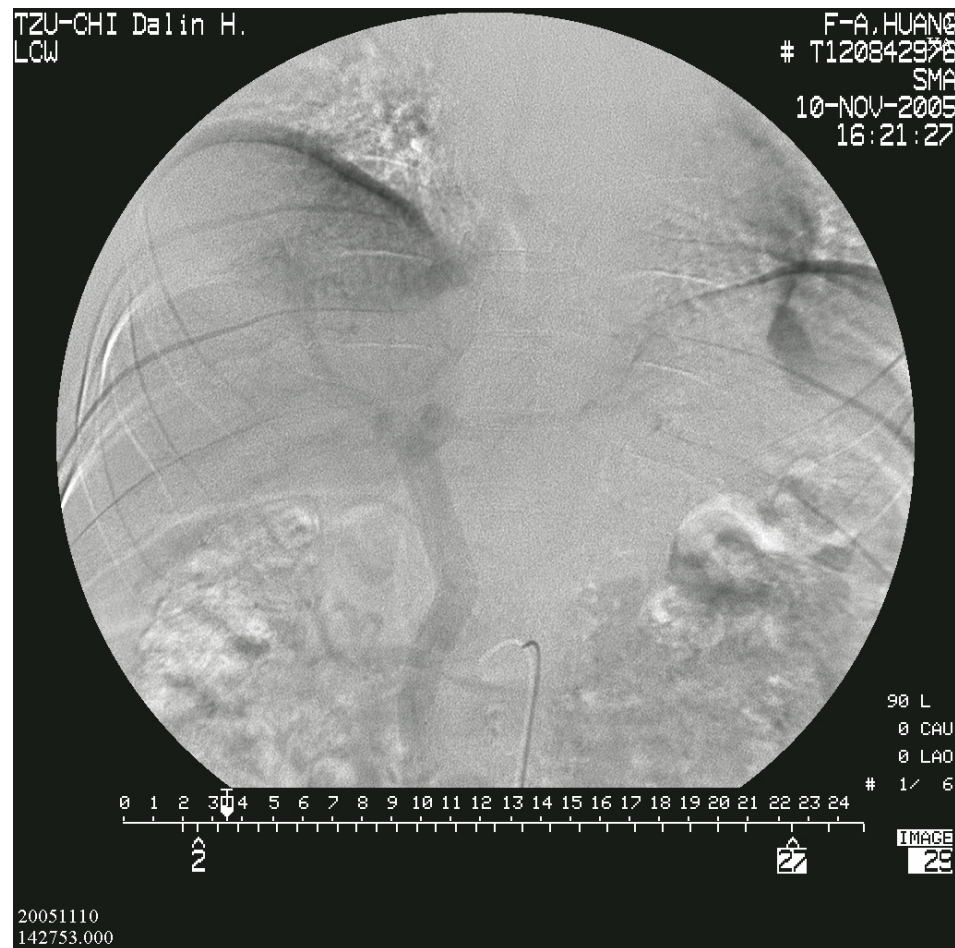
肝臟的影像檢查

Abdominal CT scan



肝臟的影像檢查

Angiography



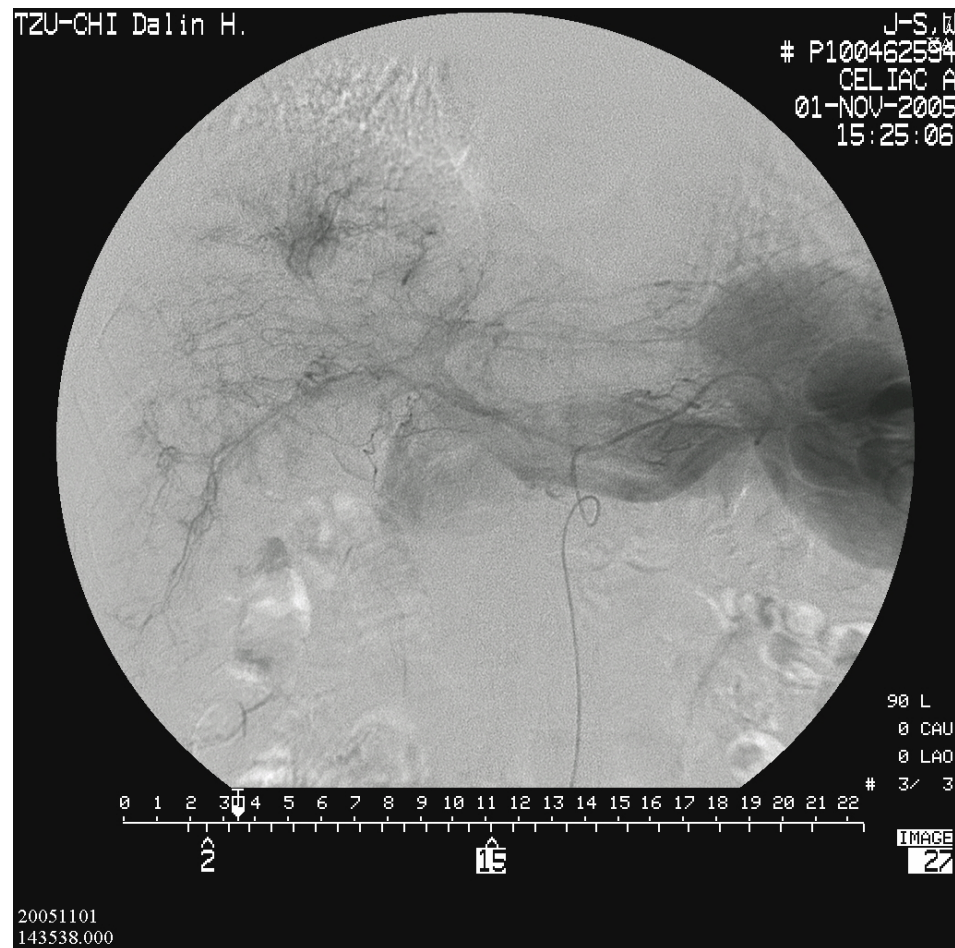
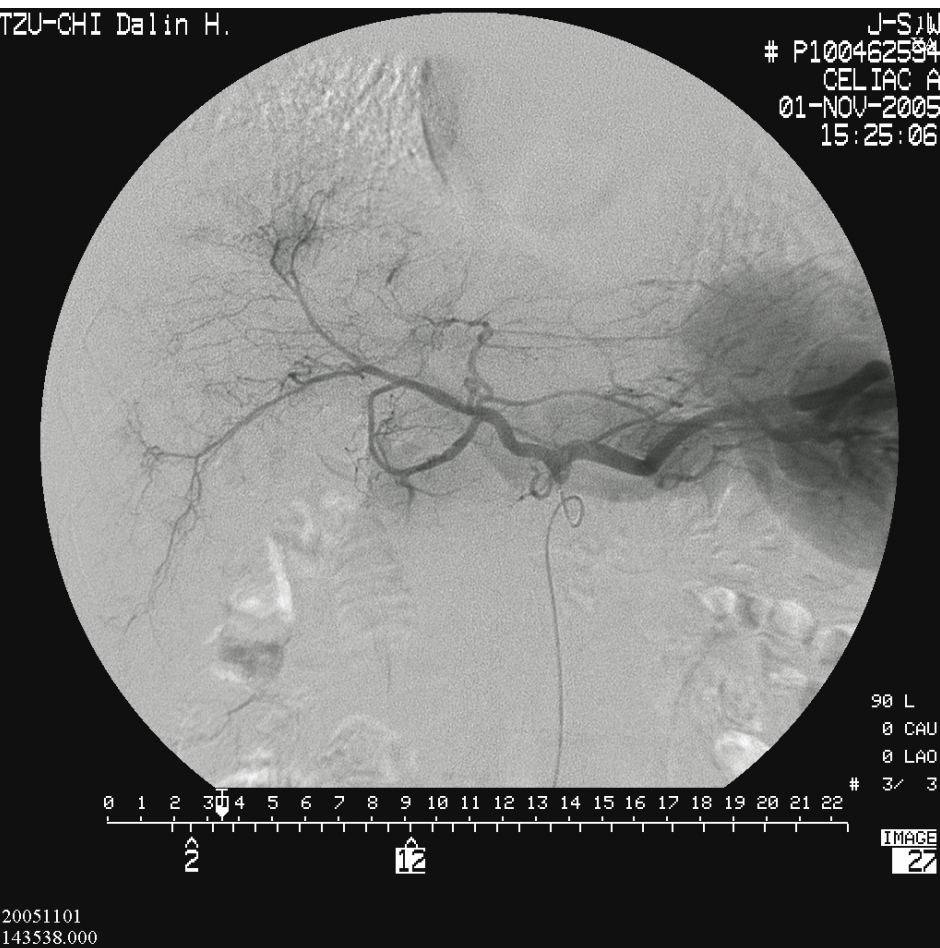
肝臟的影像檢查

Angiography



肝臟的影像檢查

Angiography



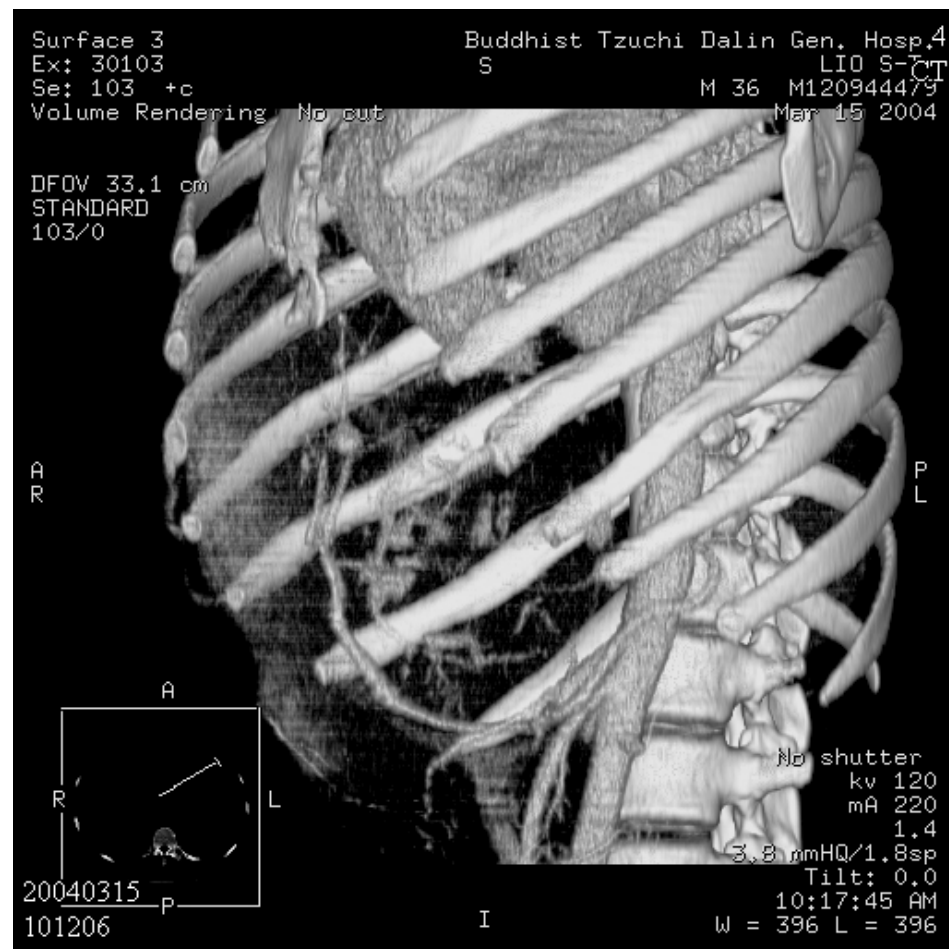
肝臟的影像檢查

MRI



肝臟的影像檢查

MRA

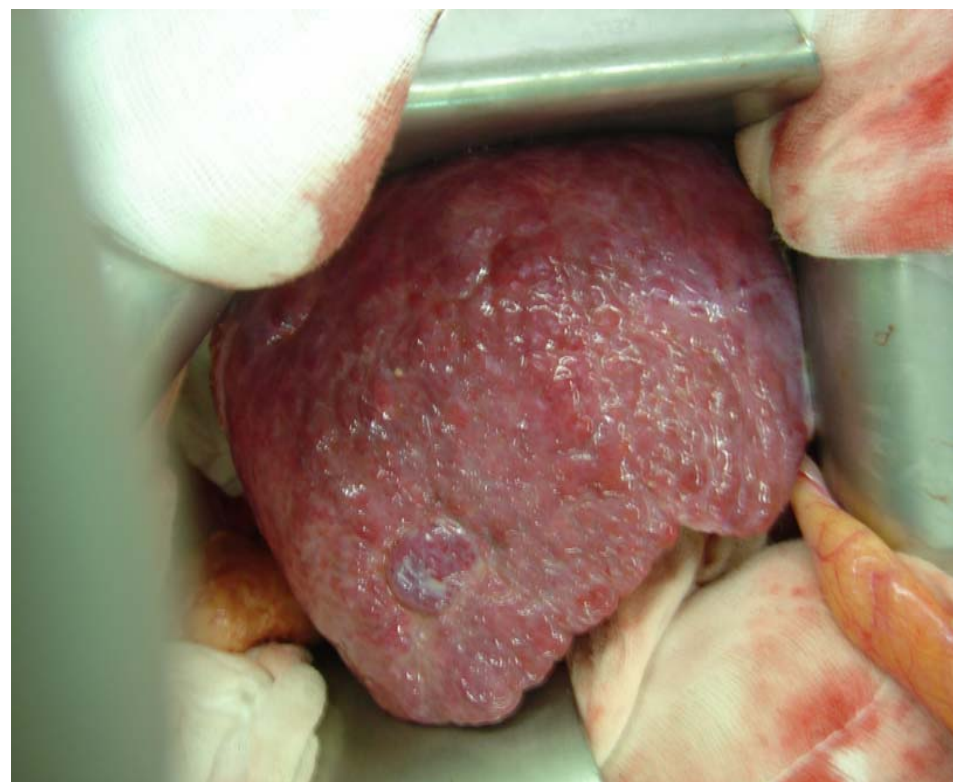
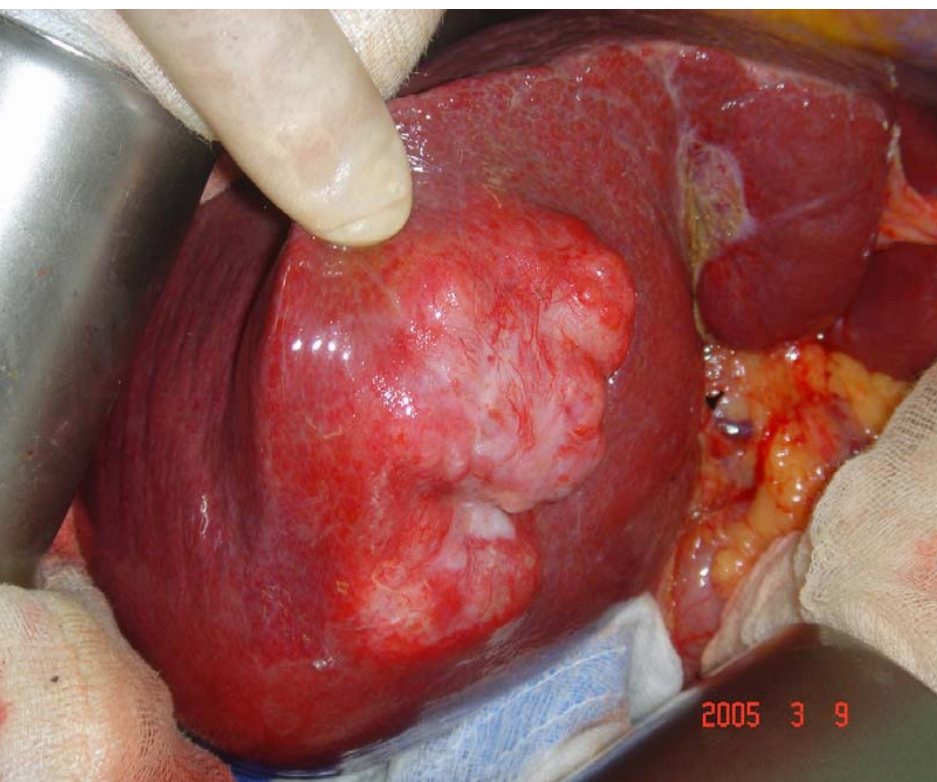


肝臟手術的常見傷口



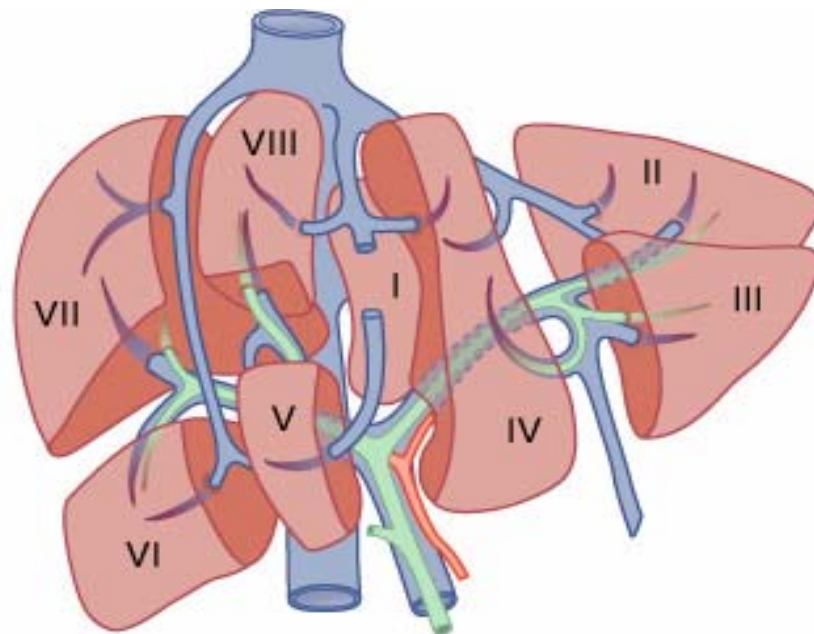
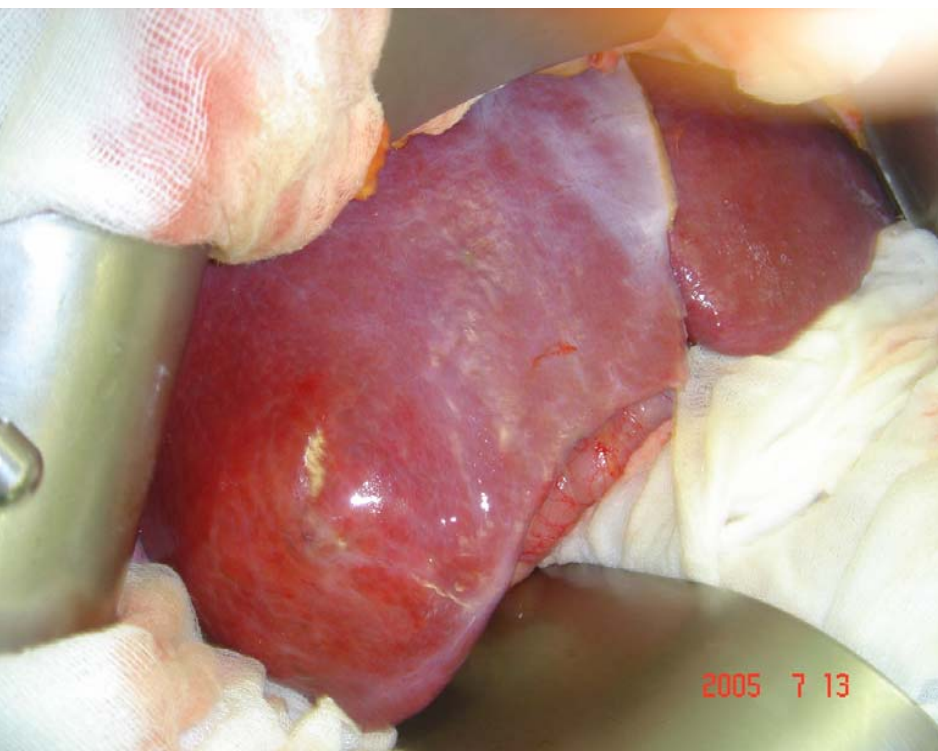
肝臟手術實例

正常肝 vs. 肝硬化



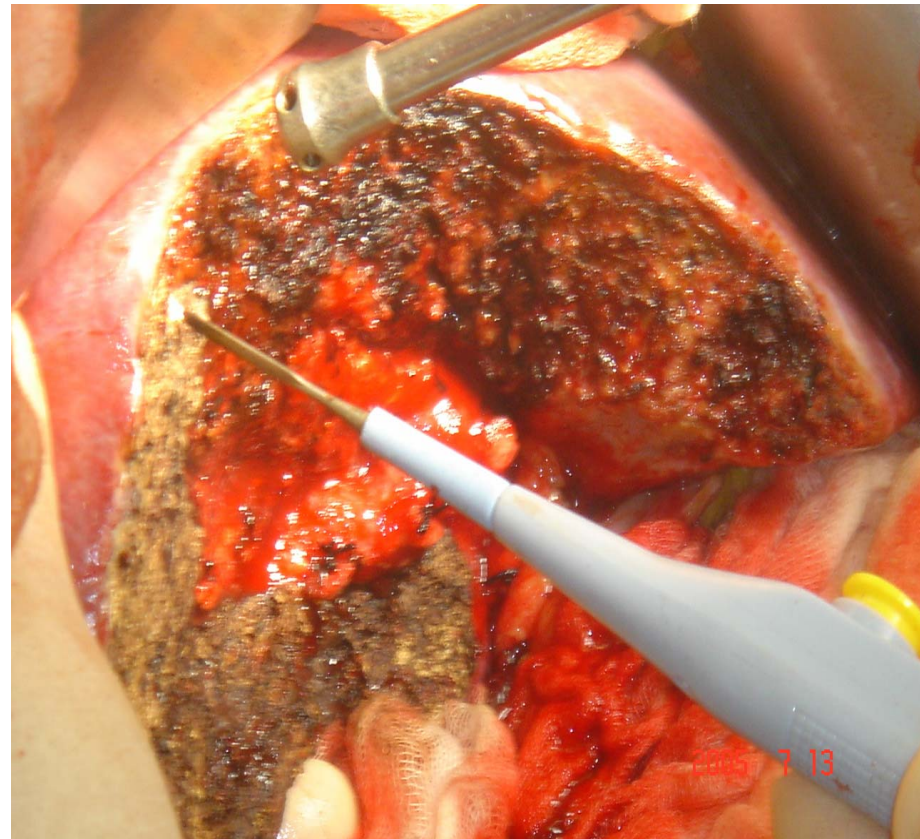
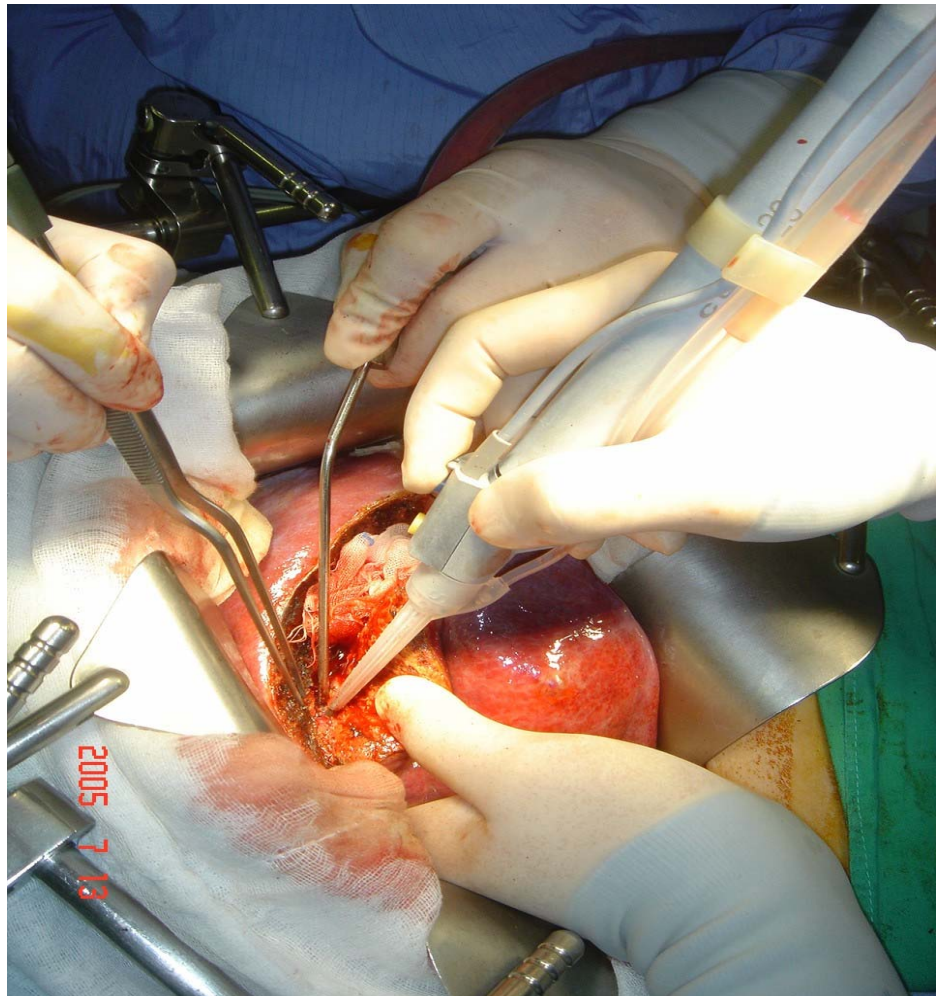
肝臟手術實例

腫瘤的部位



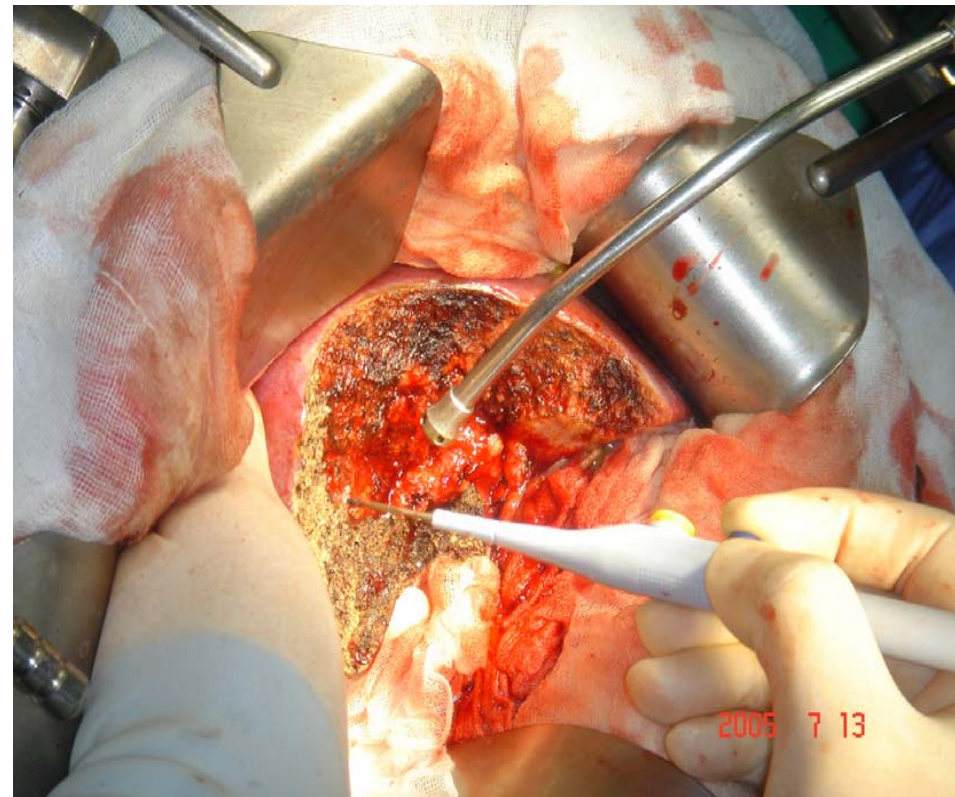
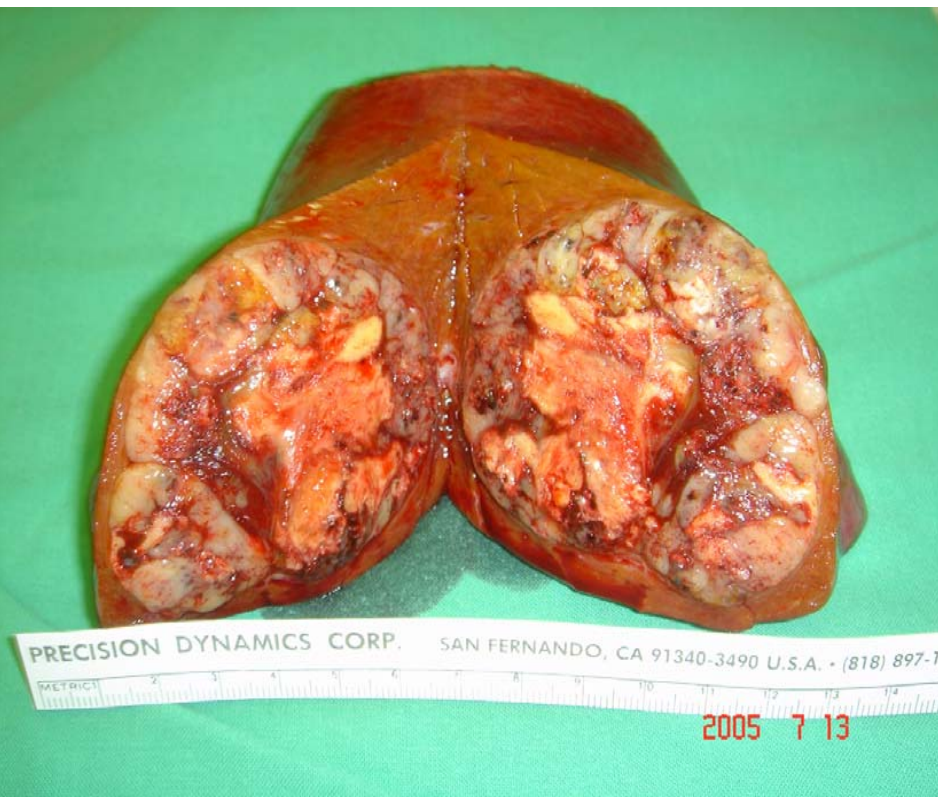
Copyright © 2004, Elsevier.

切肝利器 CUSA

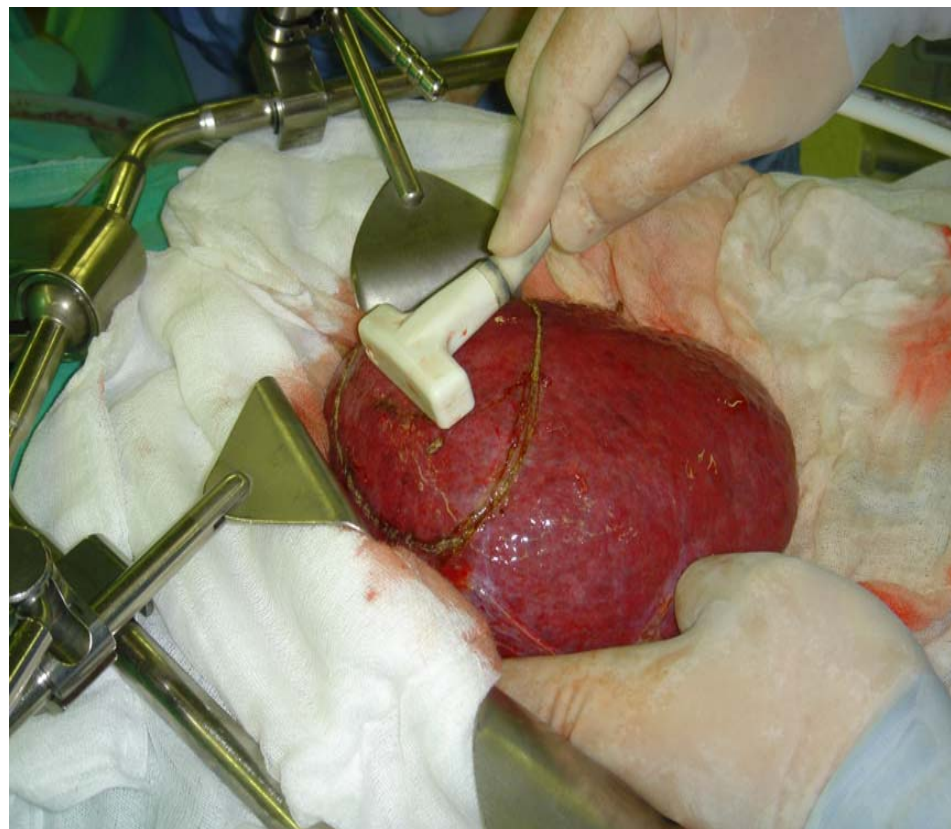


肝臟手術實例

Segmental Hepatectomy

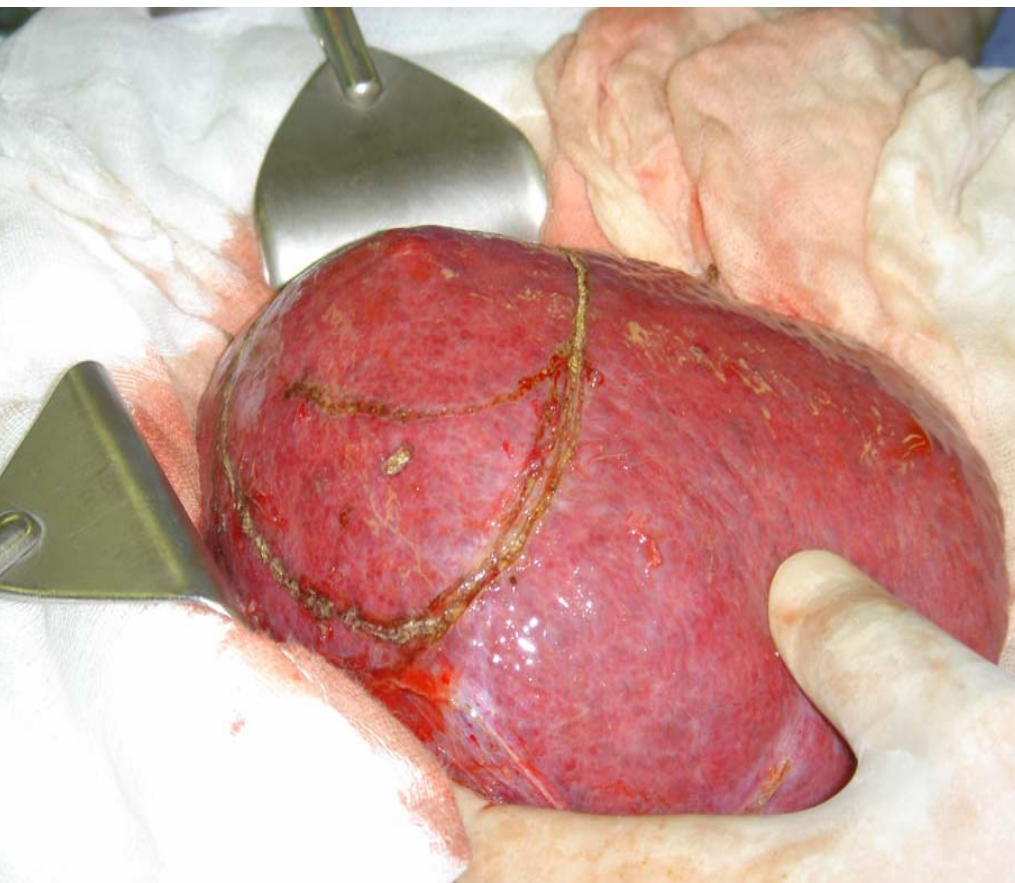


手術中肝臓超音波

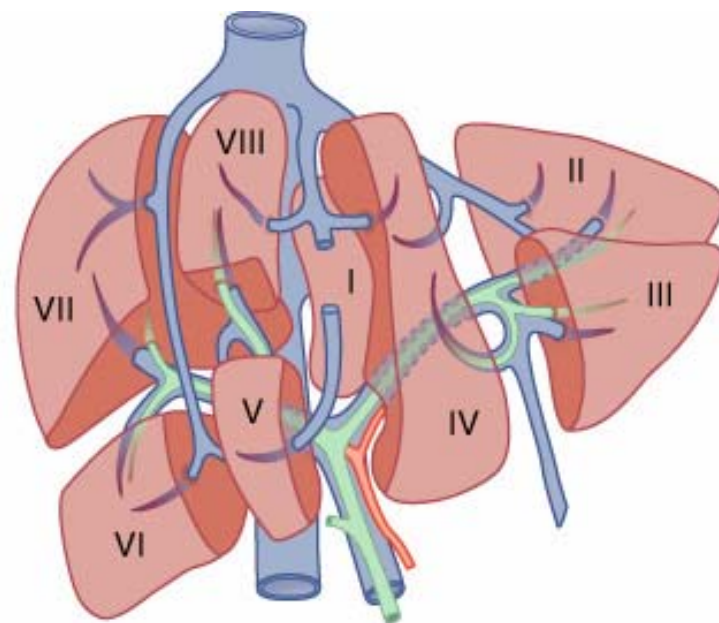


肝臟手術實例

Segmental Hepatectomy



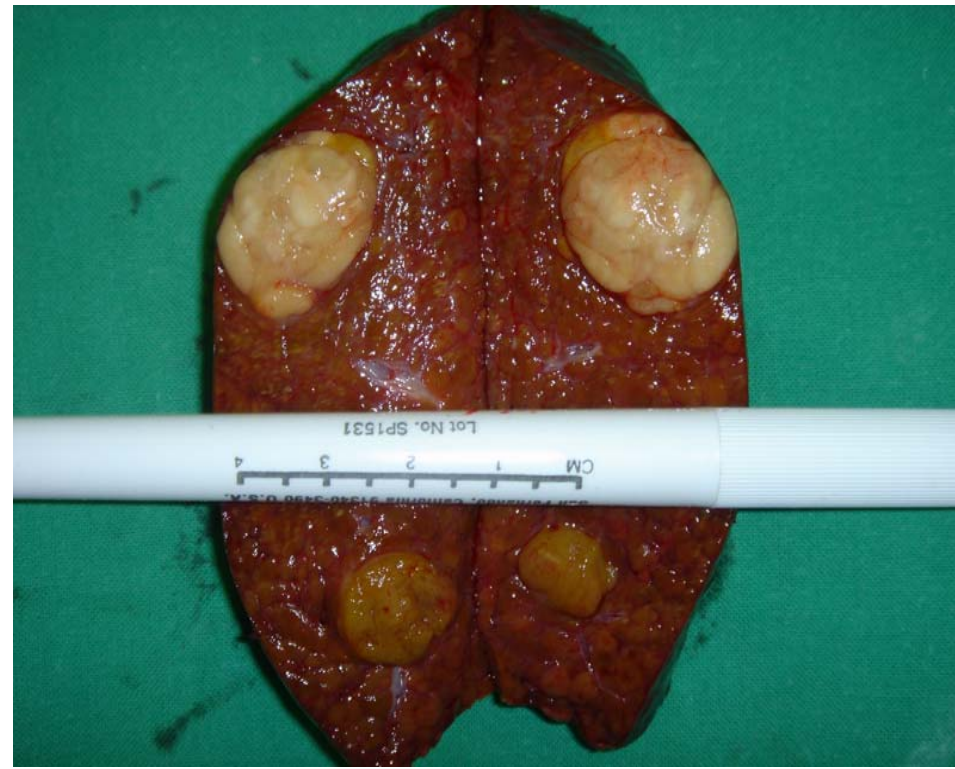
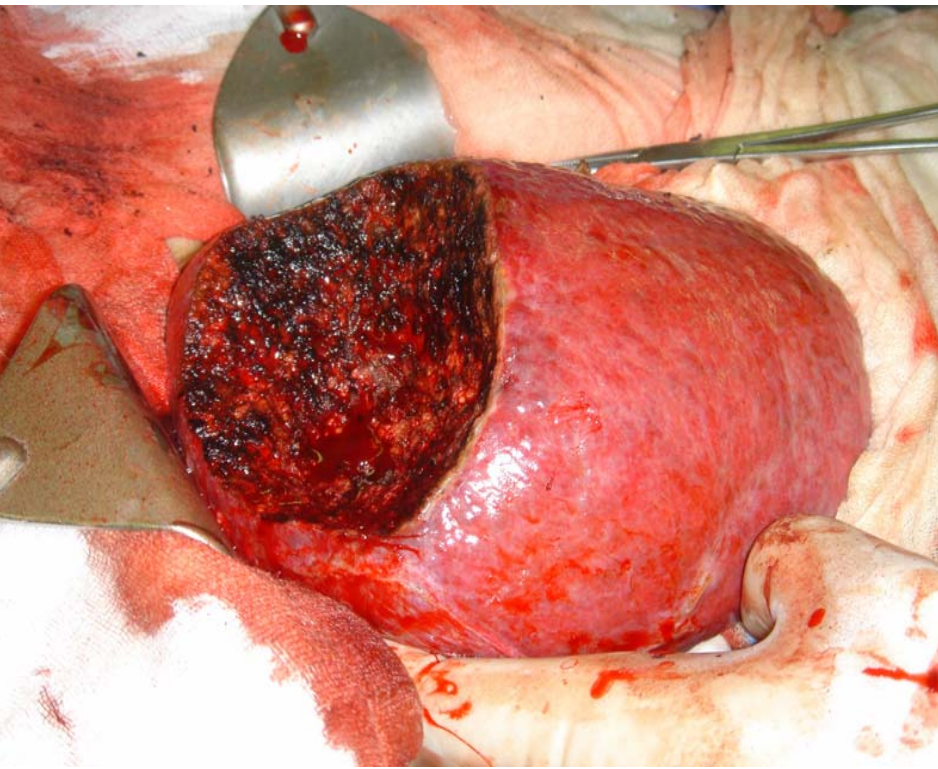
B



Copyright © 2004, Elsevier.

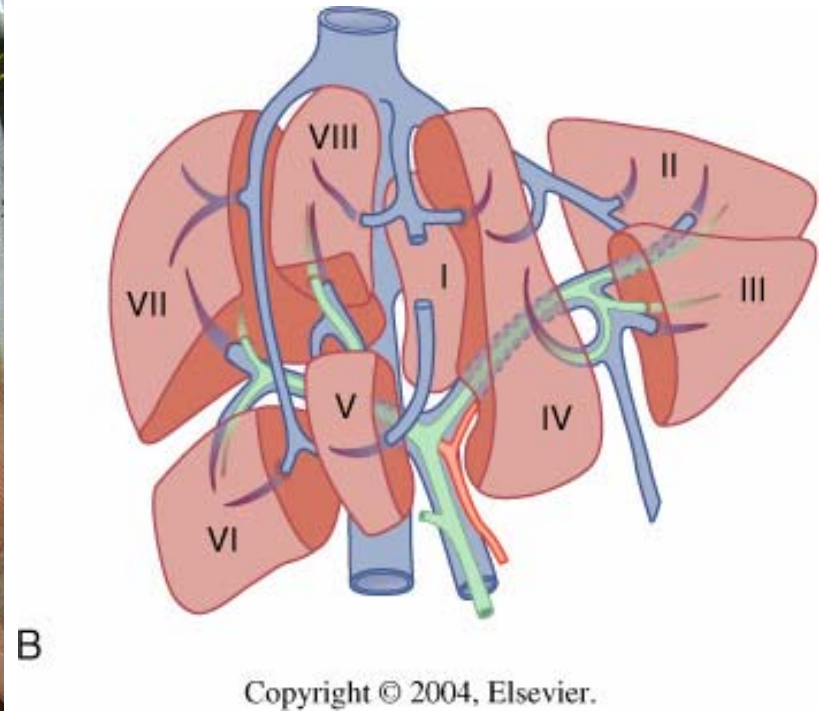
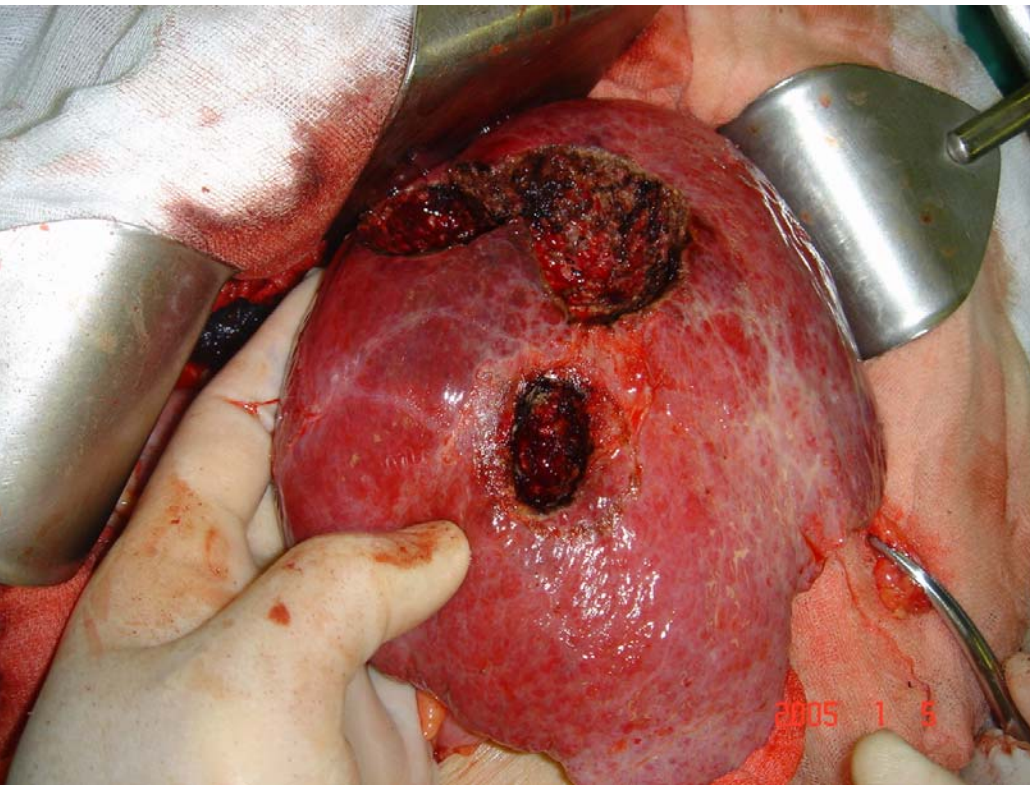
肝臟手術實例

Segmental Hepatectomy



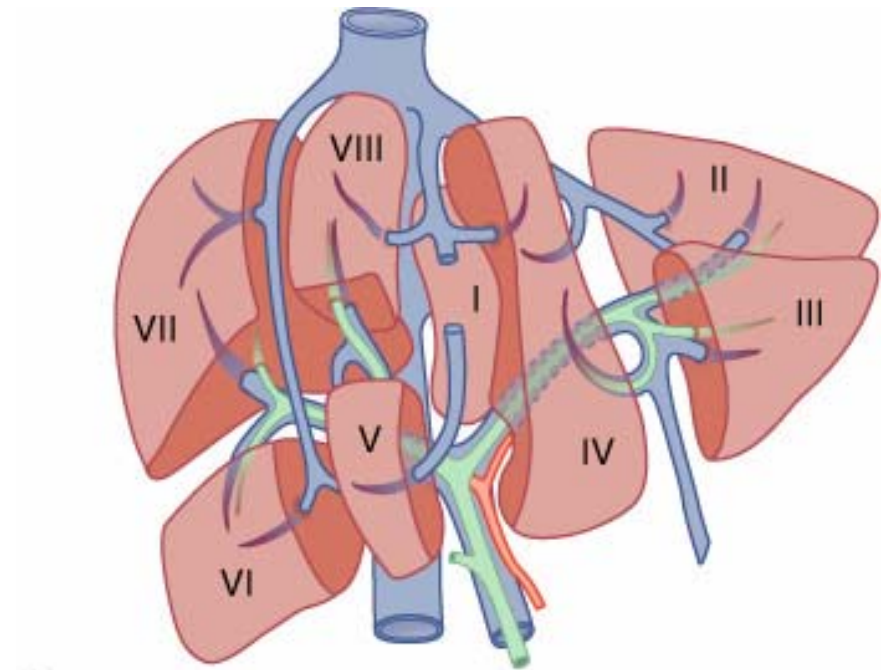
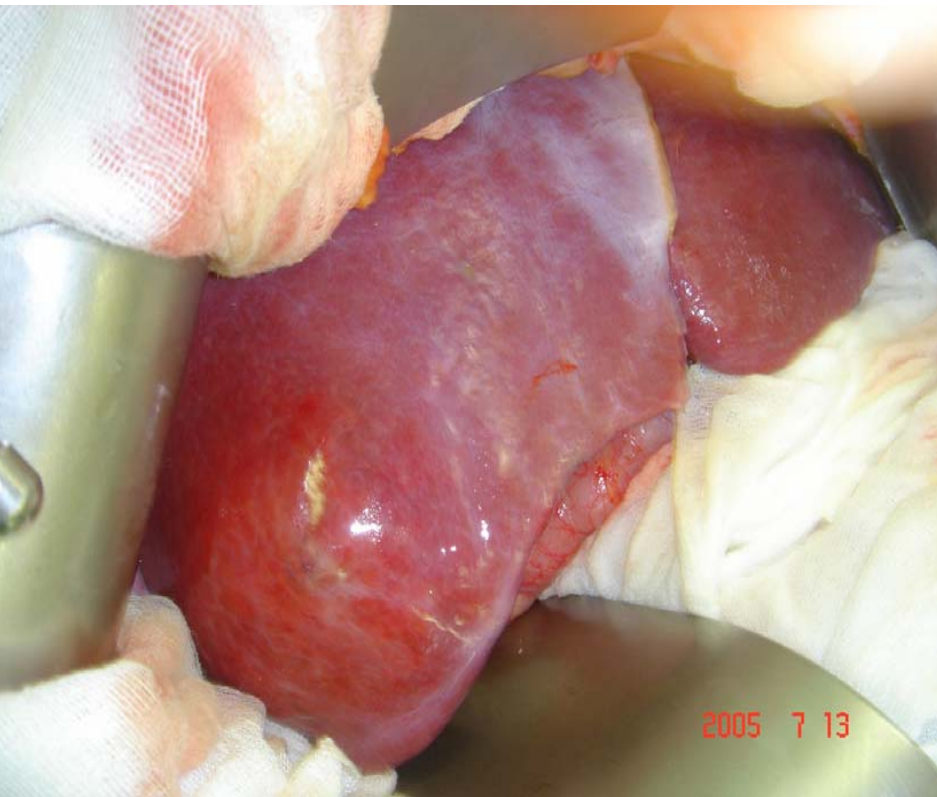
肝臟手術實例

Subsegmental Hepatectomy



肝臟手術實例

Segmental Hepatectomy

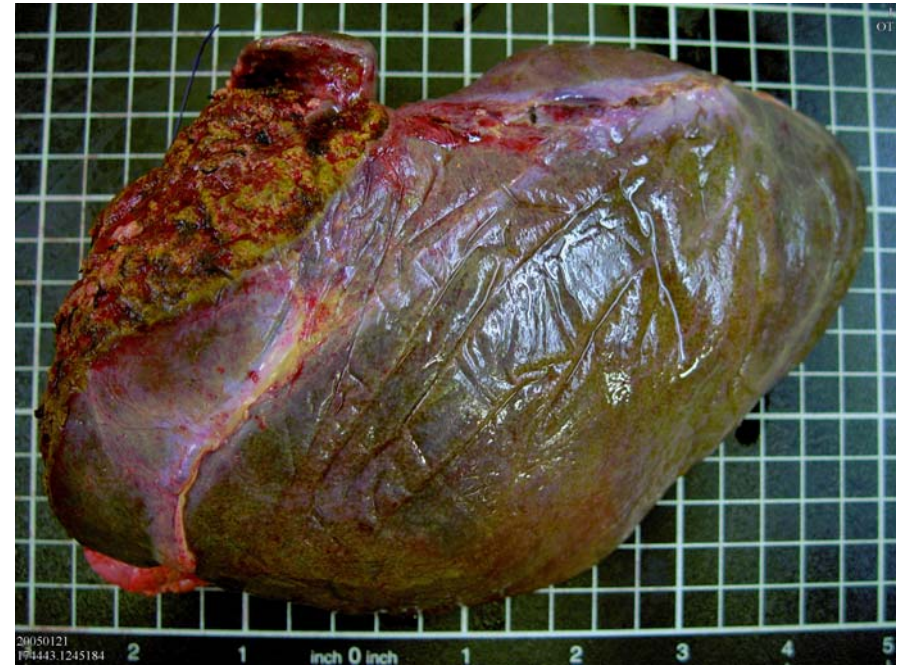
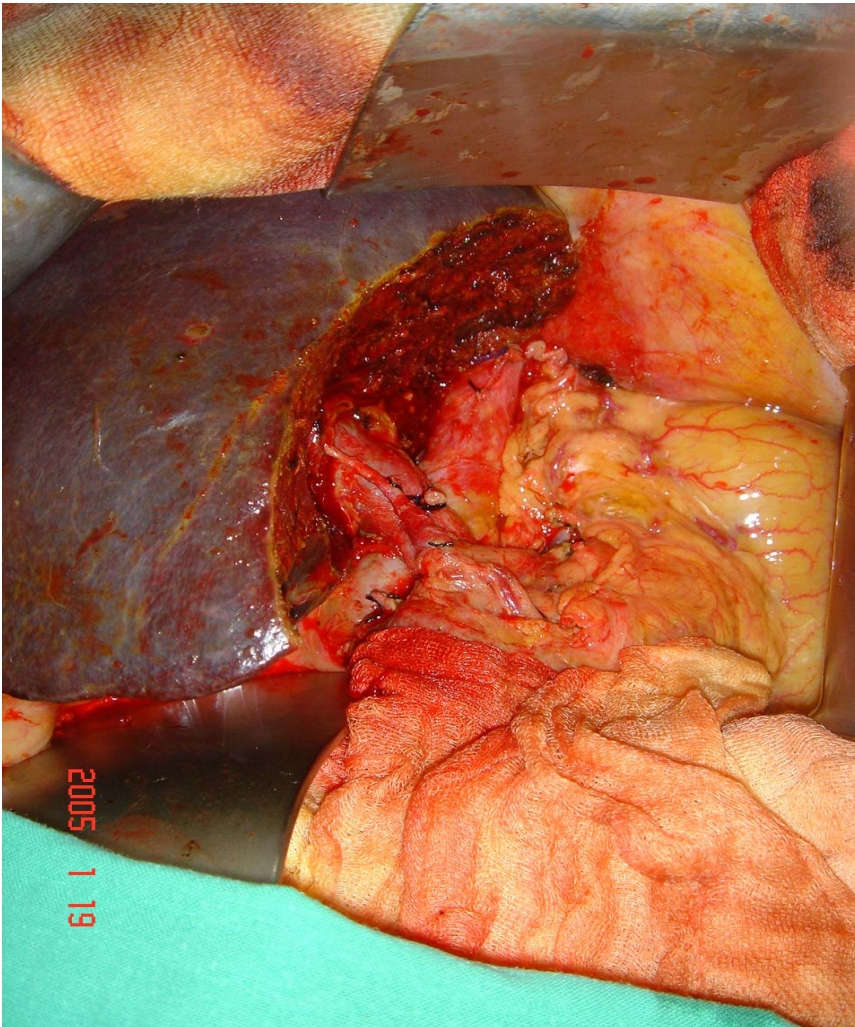


B

Copyright © 2004, Elsevier.

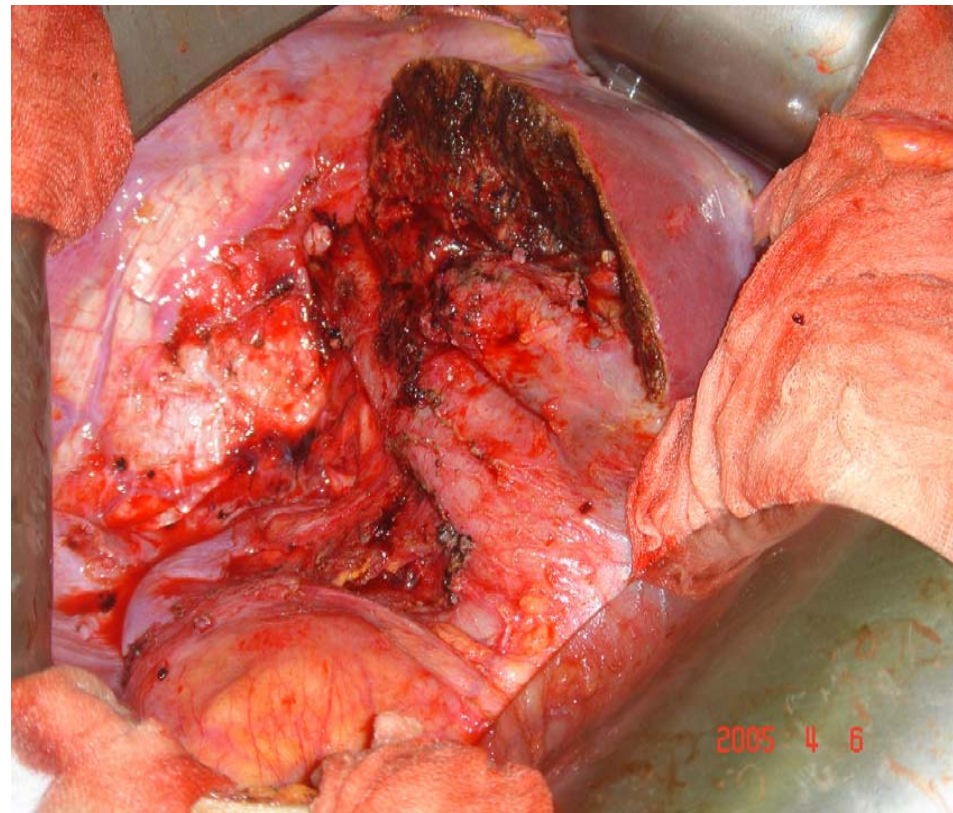
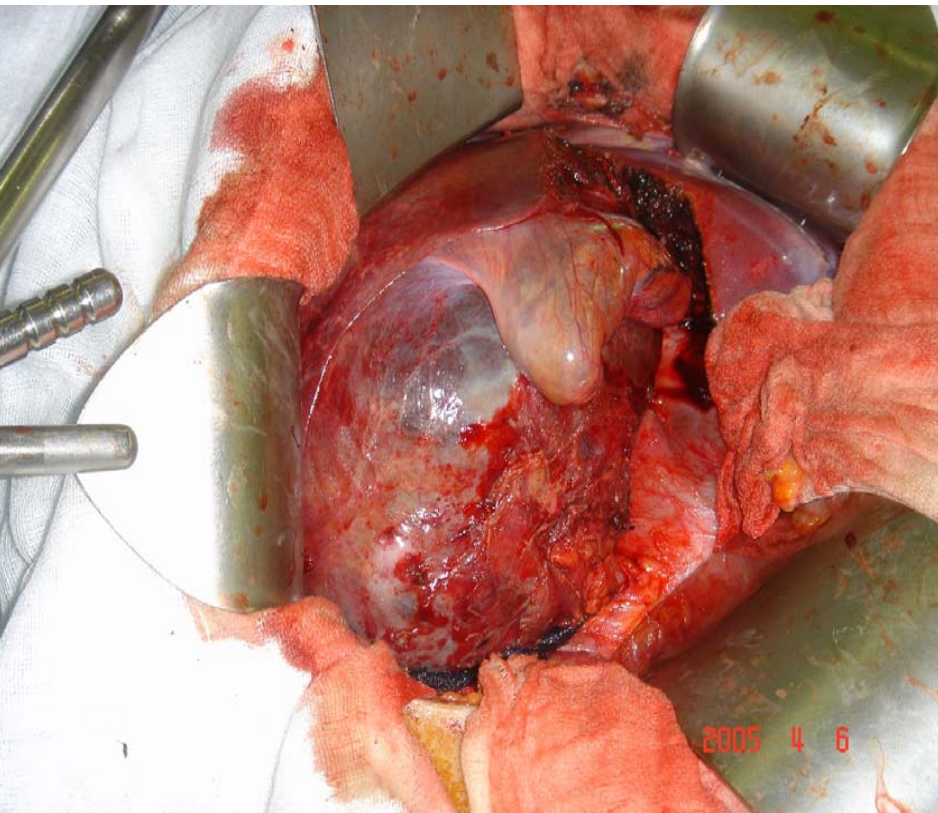
肝臟手術實例

Left Lobectomy



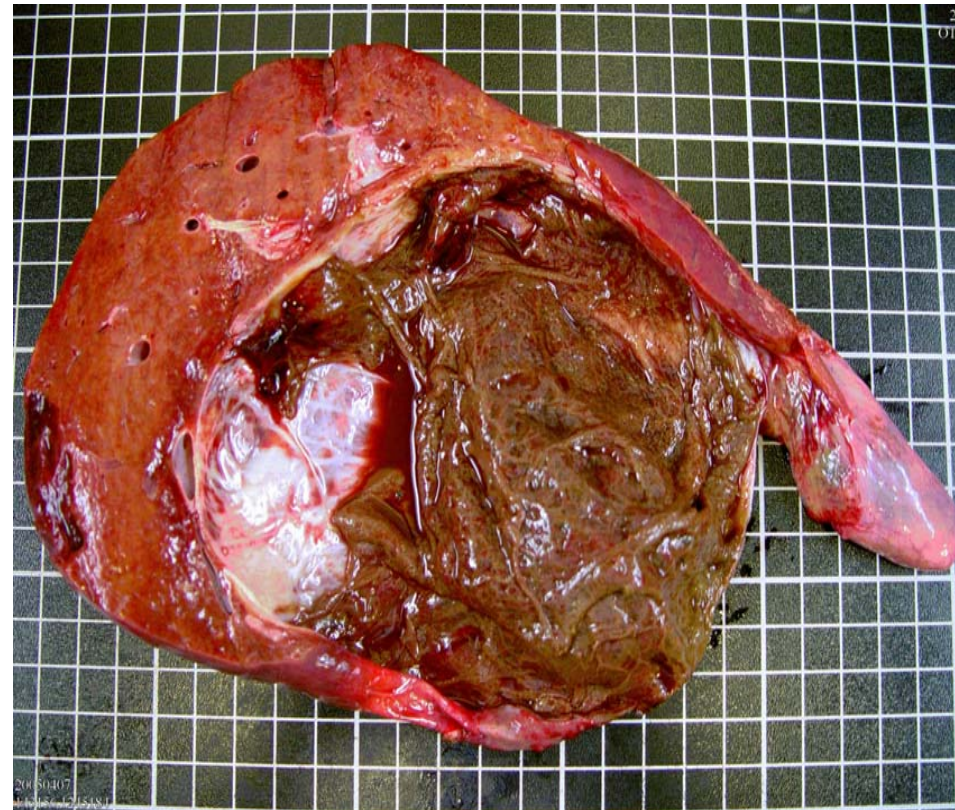
肝臟手術實例

Right Lobectomy



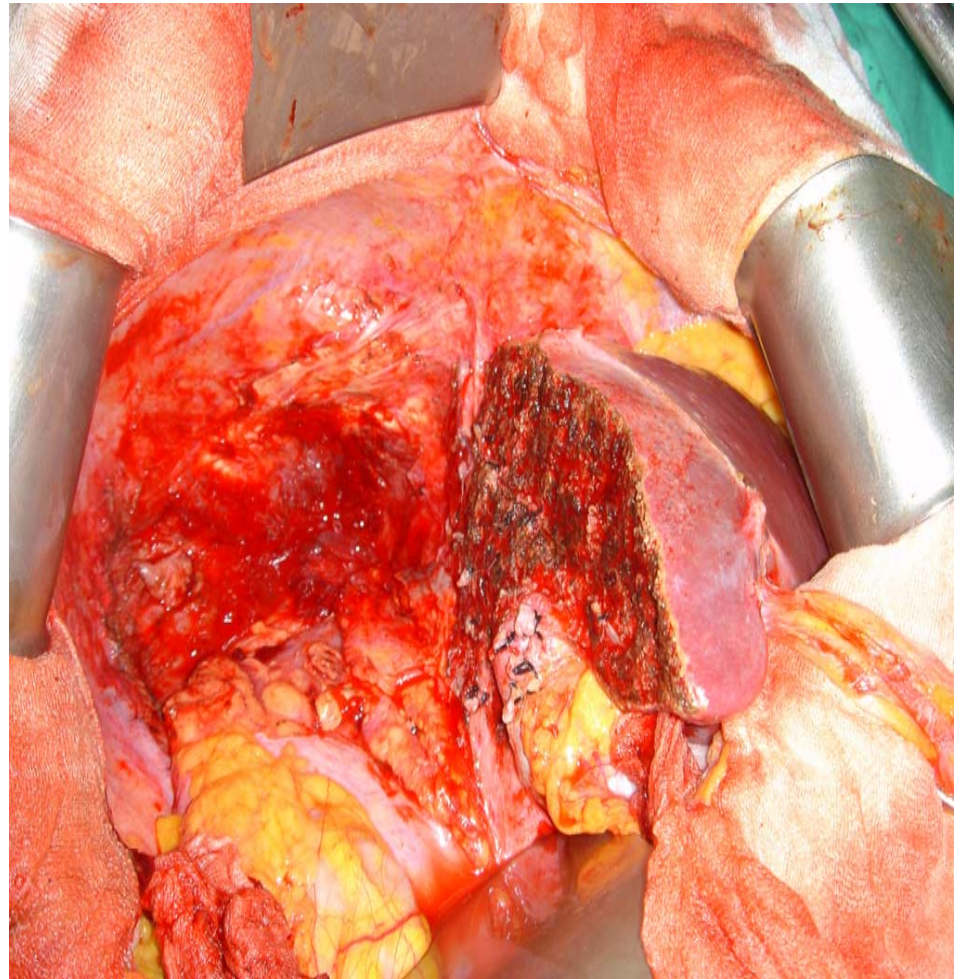
肝臟手術實例

Right Lobectomy

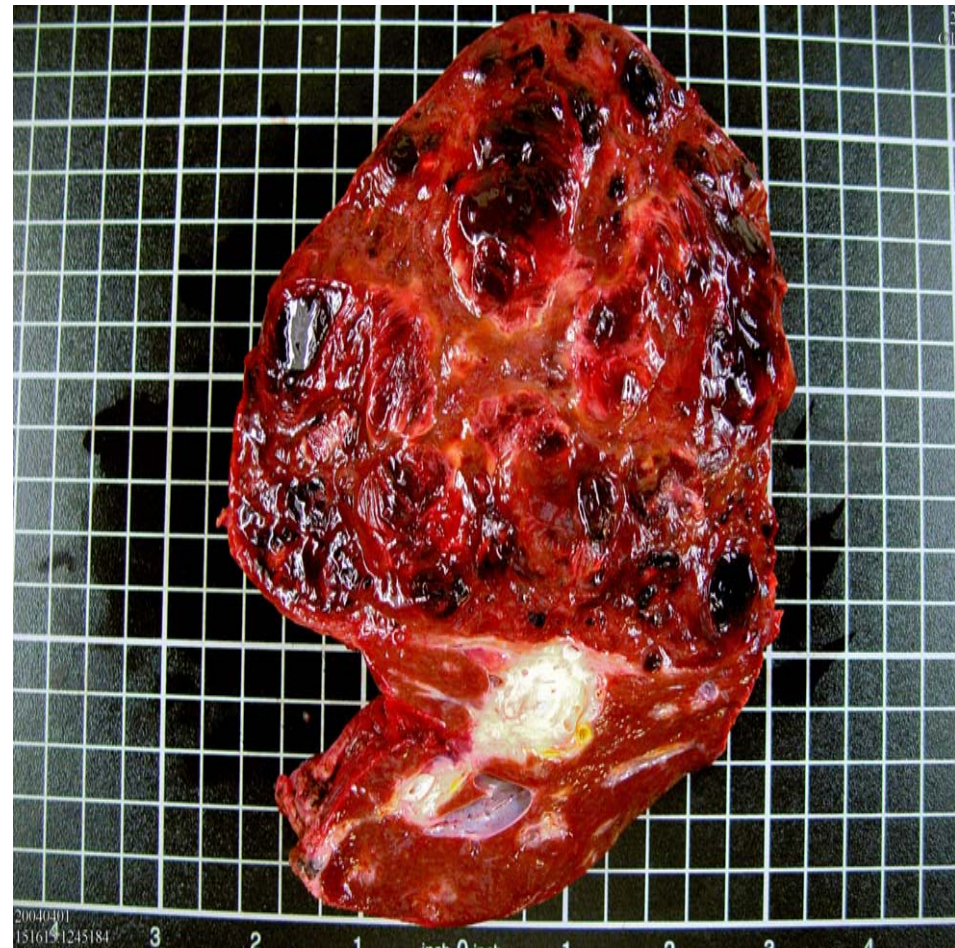
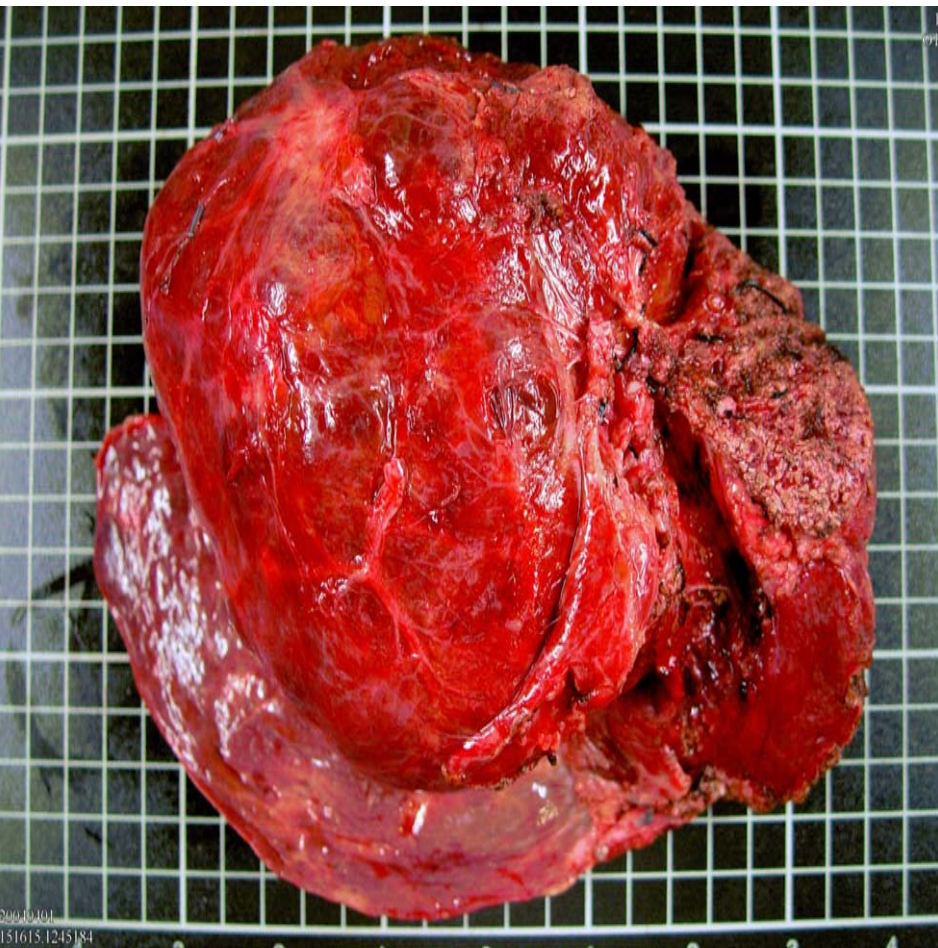


肝臟手術實例

Extended Right Lobectomy

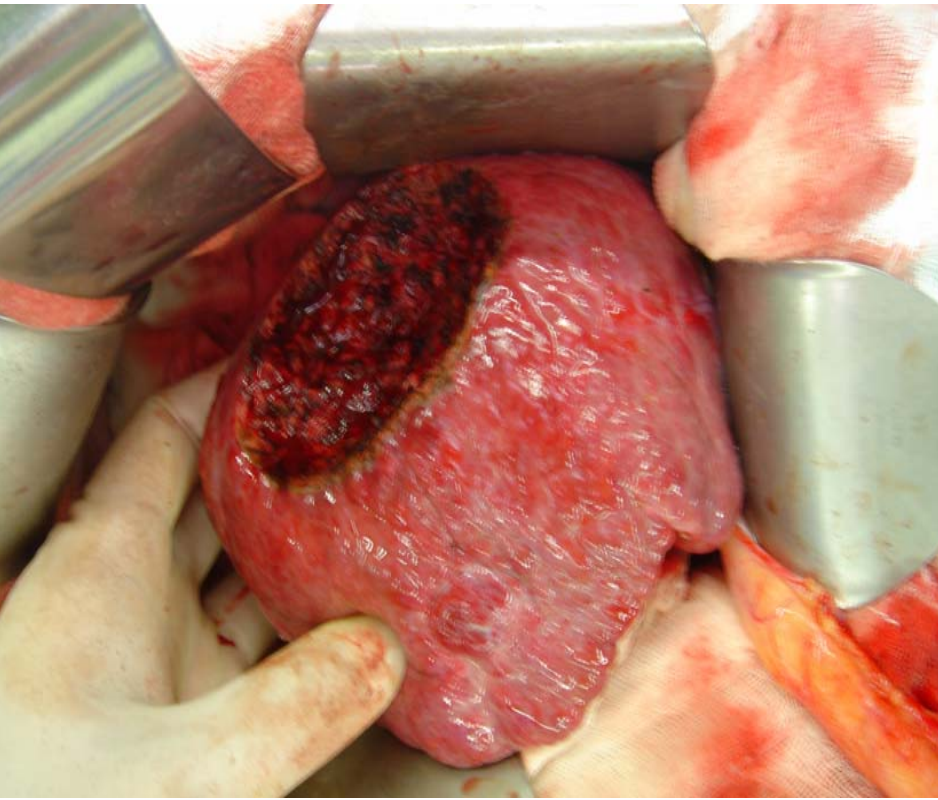


肝臟手術實例

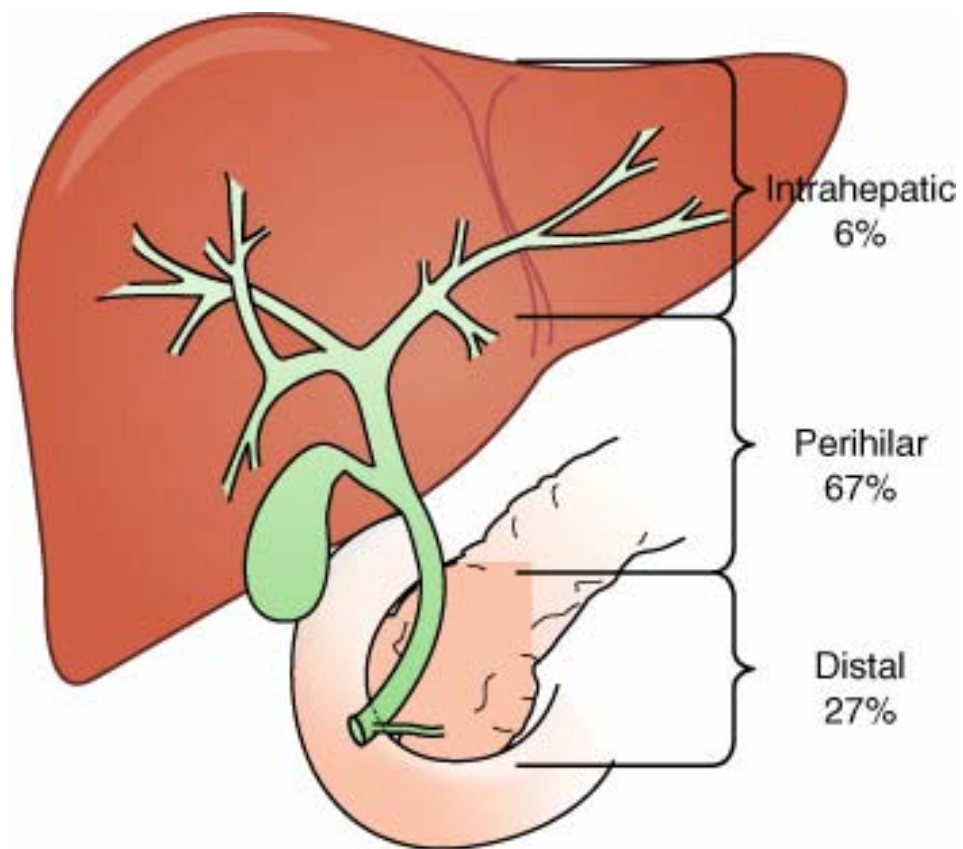


肝臟手術實例

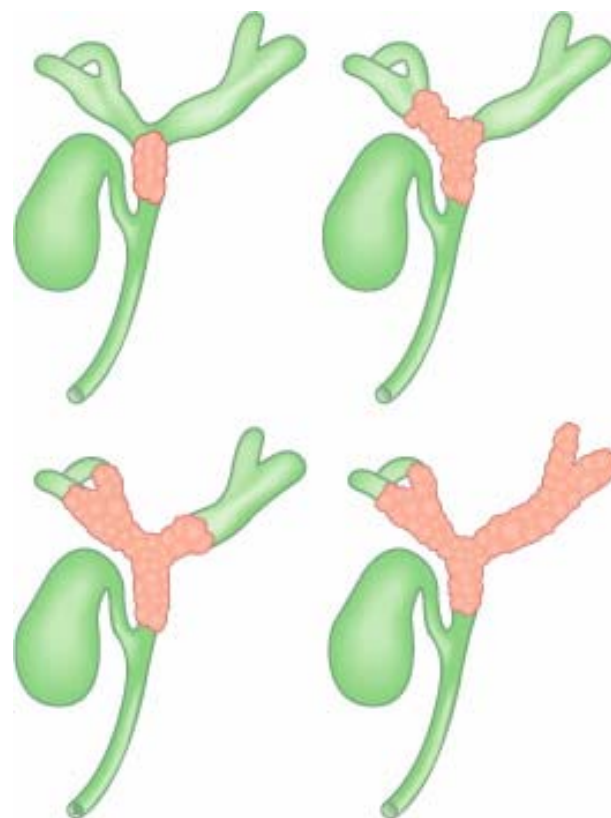
Segmental Hepatectomy



膽管癌手術

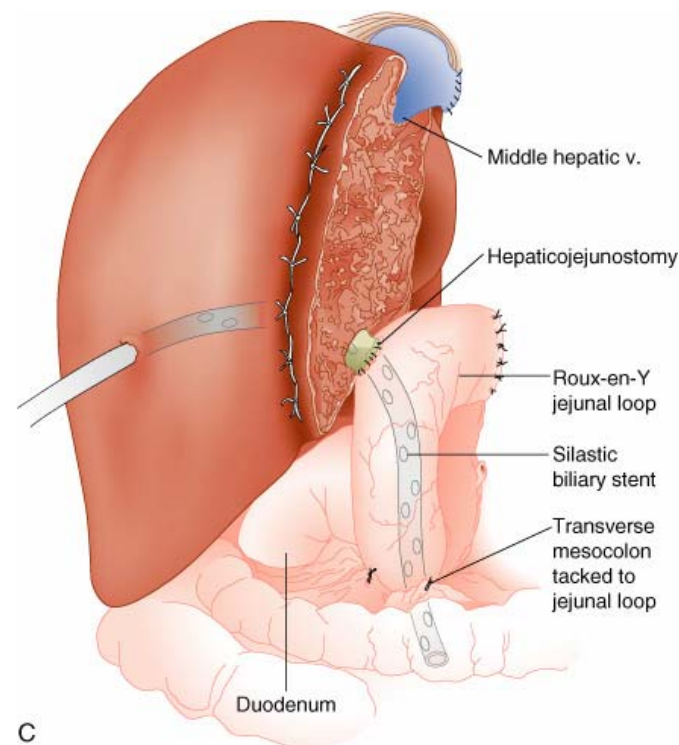
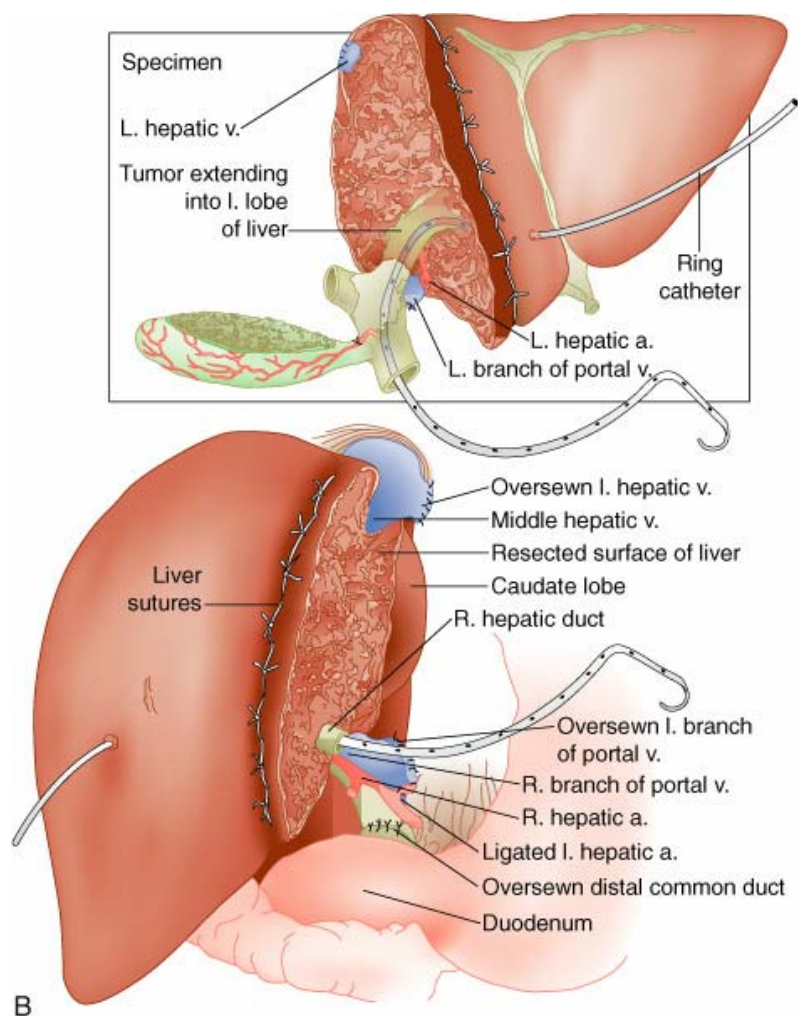


Copyright © 2004, Elsevier.



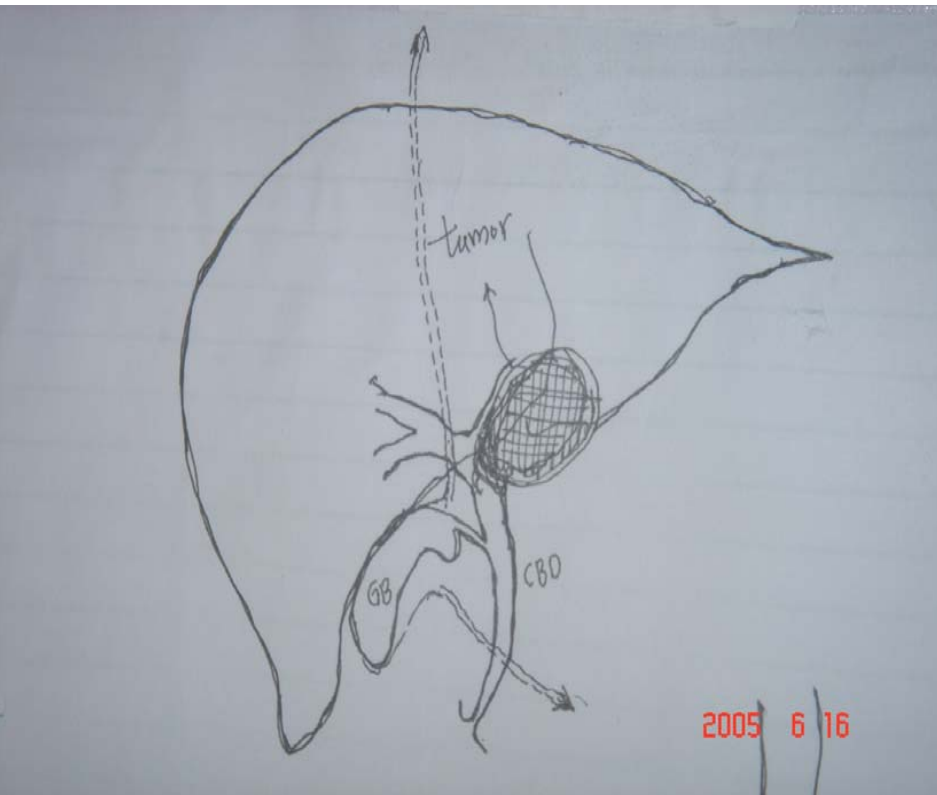
Copyright © 2004, Elsevier.

膽管癌手術

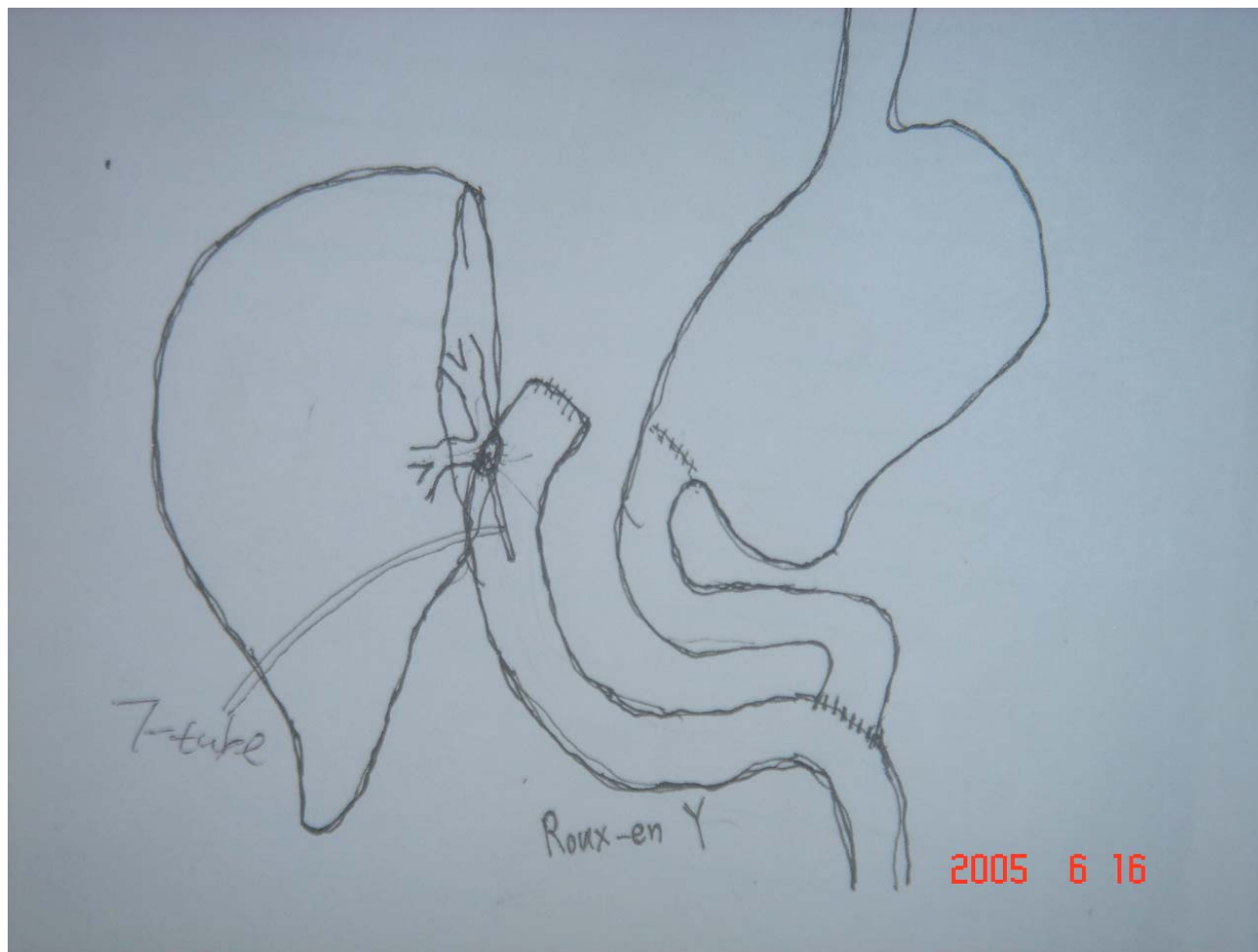


Copyright © 2004, Elsevier.

膽管癌手術 腫瘤切除



膽管癌手術 膽道重建



肝臟手術的介紹

手術後肝功能不全：黃胆

- 胆紅素增加：大量輸血, 溶血, 腹內血塊
- 肝細胞受損：缺氧, 急性肝炎發作, 感染, 藥物毒性
- 胆道阻塞：肝內膽汁鬱積(**drug induced, infection induced**), 肝外膽管阻塞(**bile duct injury, pancreatitis, gallstones**)