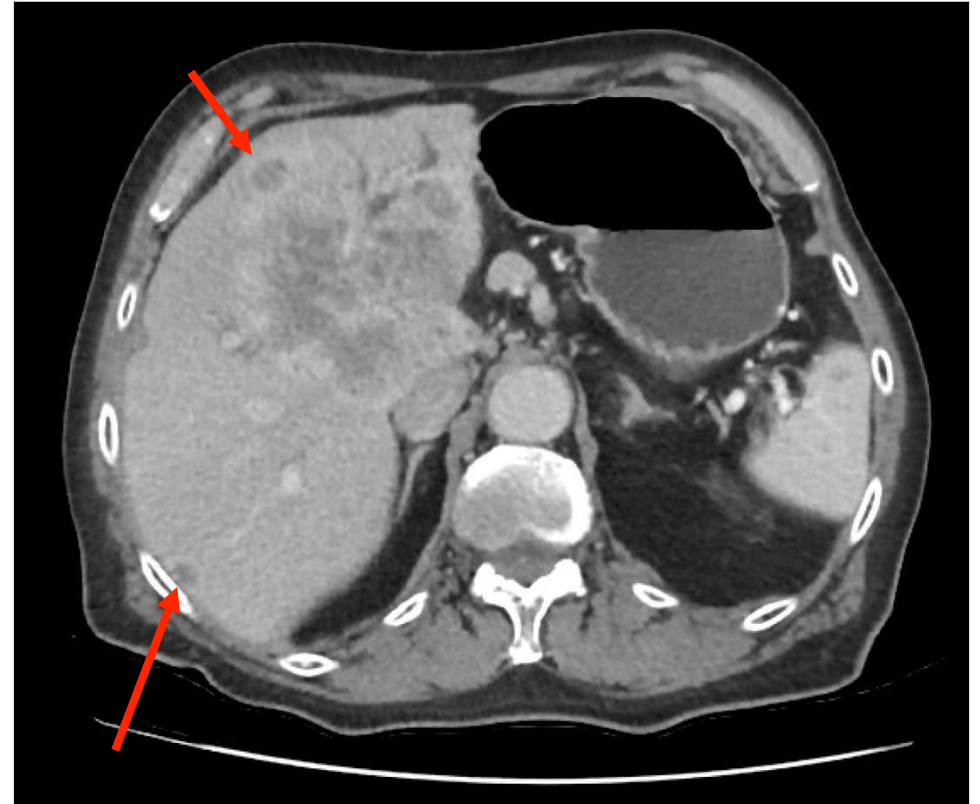
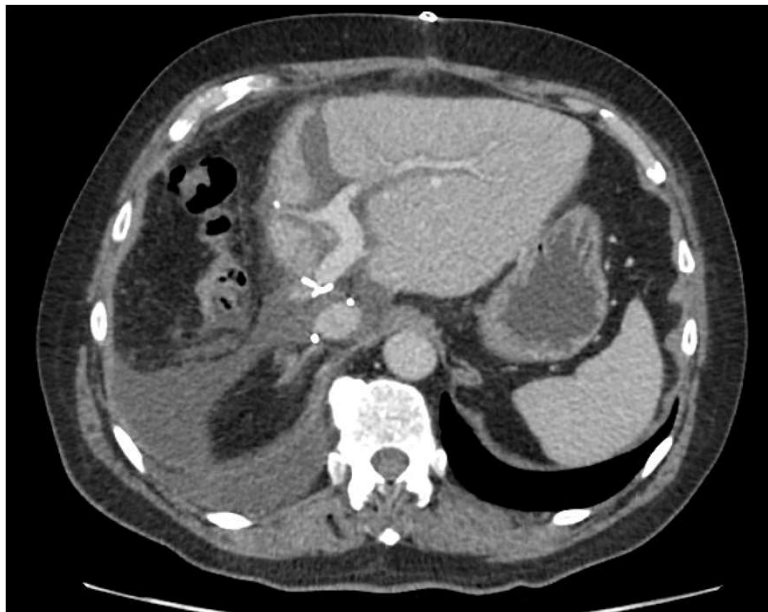
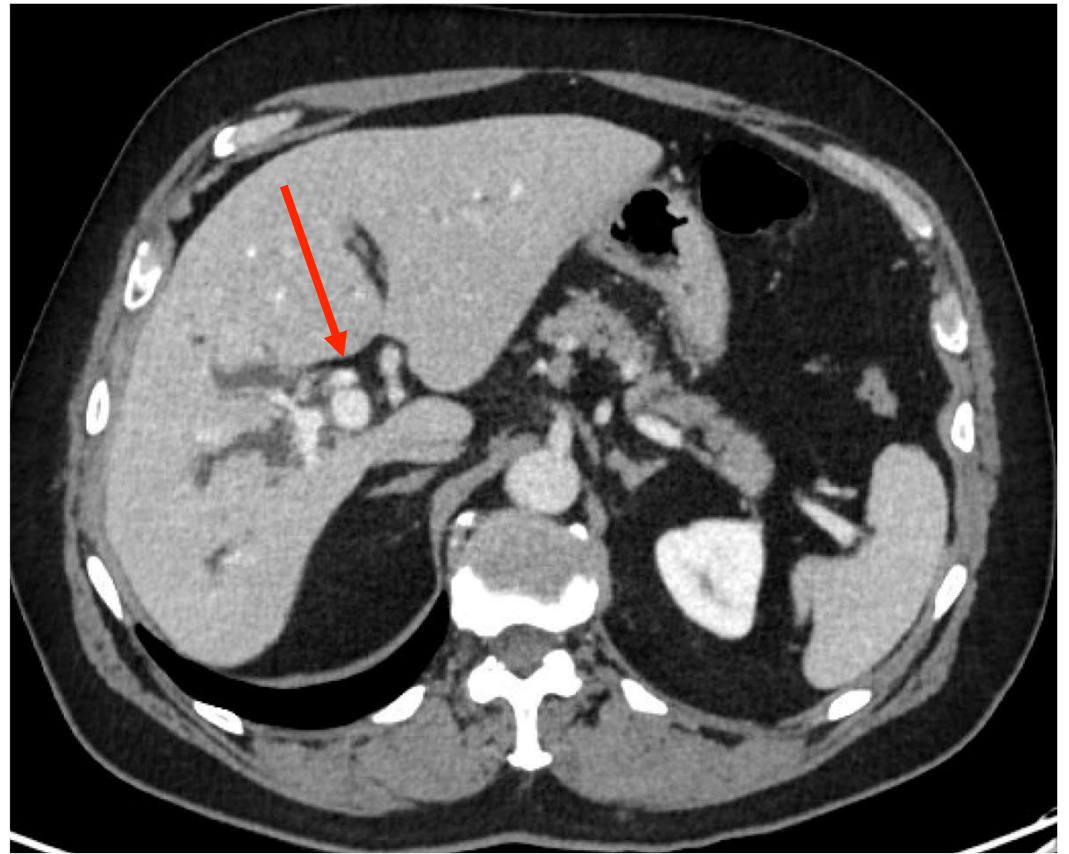
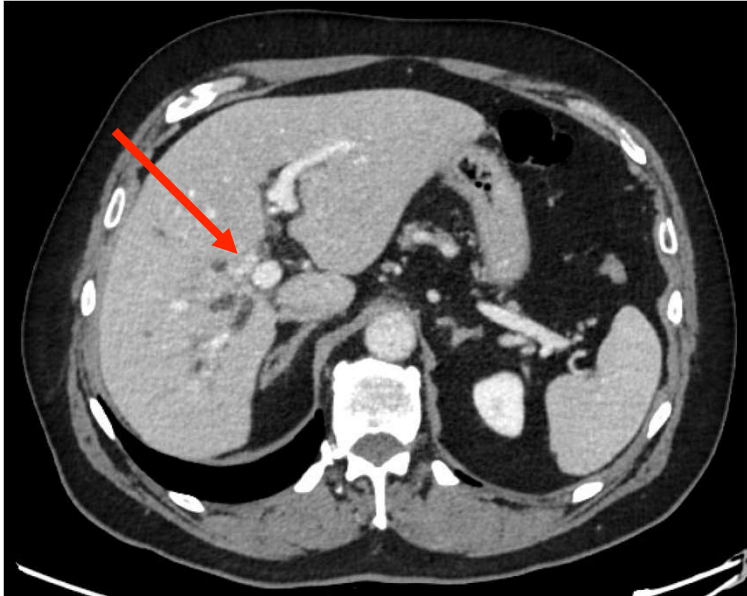


# Examples of Malignant Liver Tumours



Intrahepatic cholangiocarcinoma

# Examples of Malignant Liver Tumours



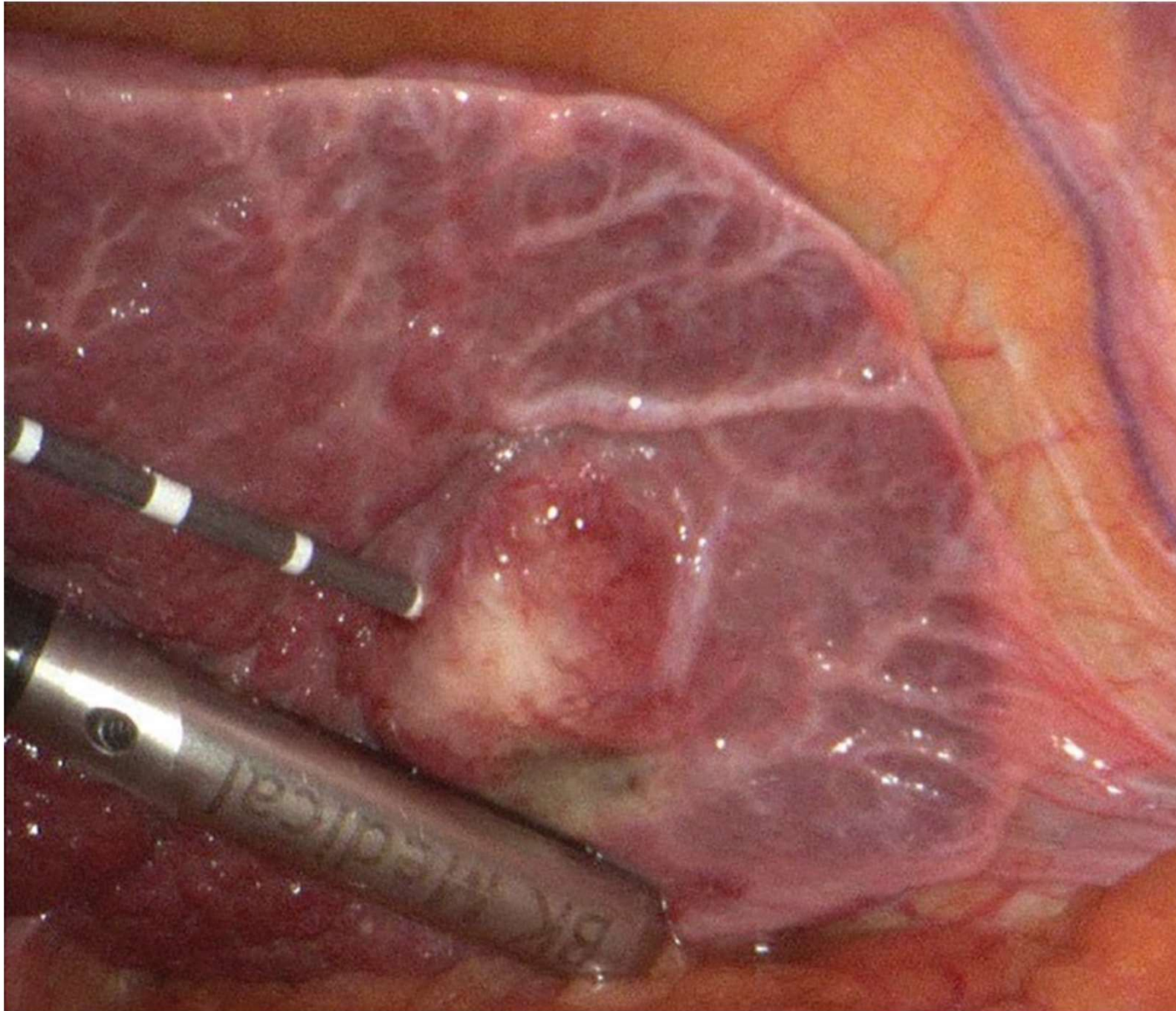
Hilar cholangiocarcinoma  
(Klatskin)

# Range of treatment options for liver tumours

## Liver directed

- Surgical resection
- Ablation - destruction of part of liver using energy techniques eg. microwave. Can be done percutaneously (by radiologists), open, or laparoscopic
- TAE/TACE - direct infusion of chemo drugs into liver arteries
- SIRT - direct infusion of radiotherapy beads into liver arteries
- Radiotherapy
- Transplantation - few indications in cancer, limited by organ availability





Laparoscopic microwave ablation

# Range of treatment options for liver tumours

## Systemic

- Traditional chemotherapy
  - Single to quad-agent chemotherapy
  - IV or oral
- Targeted therapy against specific cellular pathways in some cancers eg. cetuximab, Herceptin
- Immunotherapy eg. pembrolizumab (Keytruda) - new option

# Patient selection for liver resection

- Only a minority of patients with cancer in the liver (primary or secondary) are eligible for resection
  - Extent and distribution of cancer
  - Extrahepatic disease
  - Prognostic factors eg. stage of primary cancer, time course of development of liver mets, specific genetic mutations
  - Response to chemotherapy (progression while on chemo is bad)
  - Age and fitness

# Challenges of liver surgery

- Access
- Important structures are buried in the liver
- Bleeding
- Adequate liver remnant
- Background liver disease

# Open liver resection



Hockey stick or  
“reverse L” incision



Chevron or  
“Mercedes” incision