# How I deal with cysts of the liver

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Most cystic liver lesions are benign, and there is a tendency to over-investigate them. Dr Nicoll presents her approach to management.

## Remember

### Simple cysts

- Simple liver cysts are common, with a prevalence of 2.5% in the population (women:men, 4:1).[1] The incidence increases with age.
- Most simple cysts are asymptomatic, but symptoms can occur due to mass effect, rupture, haemorrhage or infection.[1]
- Simple cysts have a characteristic ultrasound image: echo-free, round structures with posterior acoustic enhancement; thin septations may be present. Features suggestive of an abscess or a cystic neoplasm include thick septations, an associated mass, and increased vascularity.[2]
- Simple cysts contain serous fluid.[3]
- Multiple liver or renal cysts may suggest polycystic liver disease. The liver is involved in 50% of cases of adult polycystic kidney disease.[2]

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### Complex cysts

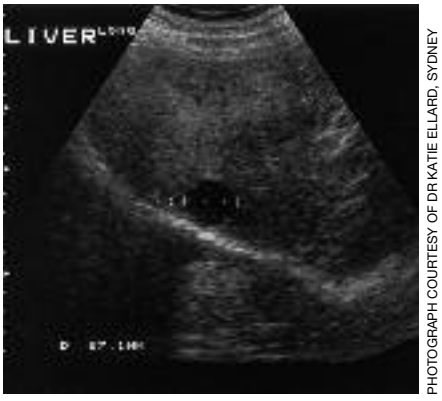
- The most common causes of parasitic cysts are *Entamoeba histolytica* (amoebic abscesses) and *Echinococcus* spp. (hydatid cysts). Amoebic abscesses are usually solitary. Mature hydatid cysts have multiple septations, internal debris and daughter cysts, with or without calcification.[1] Most patients with hydatid cysts are asymptomatic.
- Hepatocellular carcinoma rarely looks like a simple cyst.[2] Alpha-fetoprotein is elevated in 70 to 80% of cases.
- Cystic metastases can be difficult to differentiate from hepatic cysts but usually display some complexity, including mural nodules, a thickened wall or septa, and the presence of debris.

## Assessment

- There is a tendency to overinvestigate cystic lesions. The large majority are benign.
- Ultrasound is usually very sensitive and accurate in identifying simple cysts. In many cases, the ultrasound pattern and clinical context are sufficient to make a diagnosis.[3]
- Serology is important in the assessment of possible amoebic or hydatid liver abscesses.[1] A biopsy sample must not be taken because of the risk of intraperitoneal spread.
- Using radiological methods, amoebic abscesses should easily be differentiated from cysts; however, serology is very accurate if any doubt exists.[4] Concurrent amoebic colitis is rarely found.
- If metastatic malignancy is suspected, biopsy or fine needle aspiration under ultrasound guidance for histology and cytology should provide the diagnosis.

## Management

- Simple cysts generally do not require treatment; follow up ultrasound at three to six months is appropriate.[3] If there is an increase in the size and compression of the cyst or irritation of nearby structures, recommended procedures include drainage or surgical removal of the cyst or lobectomy of the liver.[3] Needle aspiration may provide temporary relief but is associated with frequent recurrence.[5]
- Polycystic liver disease is difficult to treat. Symptomatic cysts may be drained or managed surgically but always recur.
- The management of hydatid cysts in the liver is usually surgical.[6] Percutaneous injection to sterilise the cyst has been used. Albendazole (Eskazole, Zentel) has been useful when surgical management is contraindicated.[7]
- The initial treatment of choice for bacterial abscesses is percutaneous aspiration and drainage. Amoebic abscesses are usually best managed with metronidazole (Flagyl, Metrogyl, Metronide).
- The management of cystic metastatic malignancy is determined by the nature of the primary tumour. MT




PHOTOGRAPH COURTESY OF DR KATIE ELLARD, SYDNEY

Figure. A cyst in the right lobe of the liver.

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*A list of references is available on request to the editorial office.*

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