

# Clinical Aspects of Liver Diseases

## 36 Benign hepatic lesions and tumours

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## 36 Benign hepatic lesions and tumours

### 1 Definition

The term **lesion** denotes a circumscribed impairment of function or tissue structure, while the word **tumour** describes a circumscribed swelling or the growth of body tissue. • **Benign hepatic focal lesions** are circumscribed alterations. They differ markedly from the surrounding hepatic tissue, which shows a normal or diffusely changed structure. Differences in tissue type or chemical composition are revealed by imaging procedures. Benign hepatic coin lesions can appear either in solitary or multiple form. They may be only 1–2 mm in size or cover large hepatic areas, and even a complete lobe.

### 2 Classification

Benign hepatic focal lesions are usually detected as an incidental finding in sonography. As a rule, there are no subjective or characteristic complaints, no identified neoplastic disease and no objective clinical findings.

#### 2.1 Sonomorphological classification

Sonomorphological differentiation may be helpful in classifying incidentally detected liver foci: (1.) anechoic, (2.) hypoechoic, and (3.) echogenic lesions. The cyst as a typical anechoic focus displays the following characteristics: a delicate margin, dorsal sound reduction and a completely anechoic lumen. • Focal hepatic lesions or coin lesions are exceptionally variable with regard to size, number, internal echo (homogeneous or structured), demarcation from the surrounding hepatic tissue and secondary findings (displacement effects, compression). • *It is extremely important to rule out malignant hepatic tumours.* (s. tab. 36.1)

Anechoic lesions	Hypoechoic lesions
Caroli's syndrome	Adenoma
Cysts	Echinococcus alveolaris
Echinococcus alveolaris	FNH
Fresh haematoma	Focal non-fatty changes
Liquefied abscess	Fresh abscess
Osler's disease	Hamartoma
<b>Echogenic lesions</b>	Lymphoma
Fibroma	NRH
Focal fatty changes	Old haematoma
Granuloma	Peliosis hepatis
Haemangioma	Regenerative nodes
Hamartoma	
Lipoma	
Regenerative nodes	

**Tab. 36.1:** Sonomorphological classification of benign hepatic focal lesions according to their (predominant) echogenicity

#### 2.2 Histological classification

Differential diagnosis of circular hepatic foci helps to decide whether therapeutic measures are necessary, not required, or not feasible. • The histological *classification* of benign coin-like hepatic lesions differentiates between (1.) hepatocellular tumours, (2.) cholangiocellular tumours, (3.) mesenchymal tumours, and (4.) tumour-like lesions. There may also be evidence of (5.) calcareous foci. (4, 7, 12, 15) (s. tab. 36.2)

- Hepatocellular tumours**
  - Adenoma
  - Focal nodular hyperplasia (FNH)
  - Nodular regenerative hyperplasia (NRH)
  - Regenerative nodes
- Cholangiocellular tumours**
  - Bile-duct papillomatosis
  - Biliary hamartoma
  - Caroli's disease/syndrome
  - Intrahepatic bile-duct adenoma
  - Intrahepatic bile-duct cystadenoma
- Mesenchymal tumours**
  - Angiolipoma
  - Angiomyolipoma
  - Benign haemangioendothelioma
  - Cavernous haemangioma
  - Chondroma
  - Fibrous tumour
  - Focal fatty changes
  - Glomangioma
  - Leiomyoma
  - Lipoma
  - Lymphangioma
  - Mesenchymal hamartoma
  - Mesothelioma
  - Myelolipoma
  - Myolipoma
  - Myxoma
  - Schwannoma
- Tumour-like lesions**
  - Abscess
  - Cysts
  - Granuloma
  - Haematoma
  - Inflammatory pseudotumour
  - Peliosis hepatis
- Calcareous foci**

**Tab. 36.2:** Histological classification of benign hepatic coin lesions

### 3 Diagnosis

#### 3.1 Anamnesis

In most cases, benign liver tumours are detected by chance during sonography. Any *information* elicited during anamnesis about the long-term use of contraceptives, androgens or medication as well as any possible