

Liver Tumors

Presented by

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I. Introduction

	<u>Today's Topics</u>
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- Definition of liver tumors >
- Importance of liver tumors as a health concern >
- Overview of the different types of liver tumors >
- Types of liver tumors >
- Symptoms of liver tumors >
- Diagnosis and treatment >



Classification

Benign

- Haemangioma.
- Adenoma.
- Focal nodular hyperplasia.

Malignant

1 Primary:

a hepatocellular carcinoma (hepatoma);

b fibrolamellar carcinoma, uncommon variant of hepatoma affecting young children;

c cholangiocarcinoma.

2 Secondary (most common):

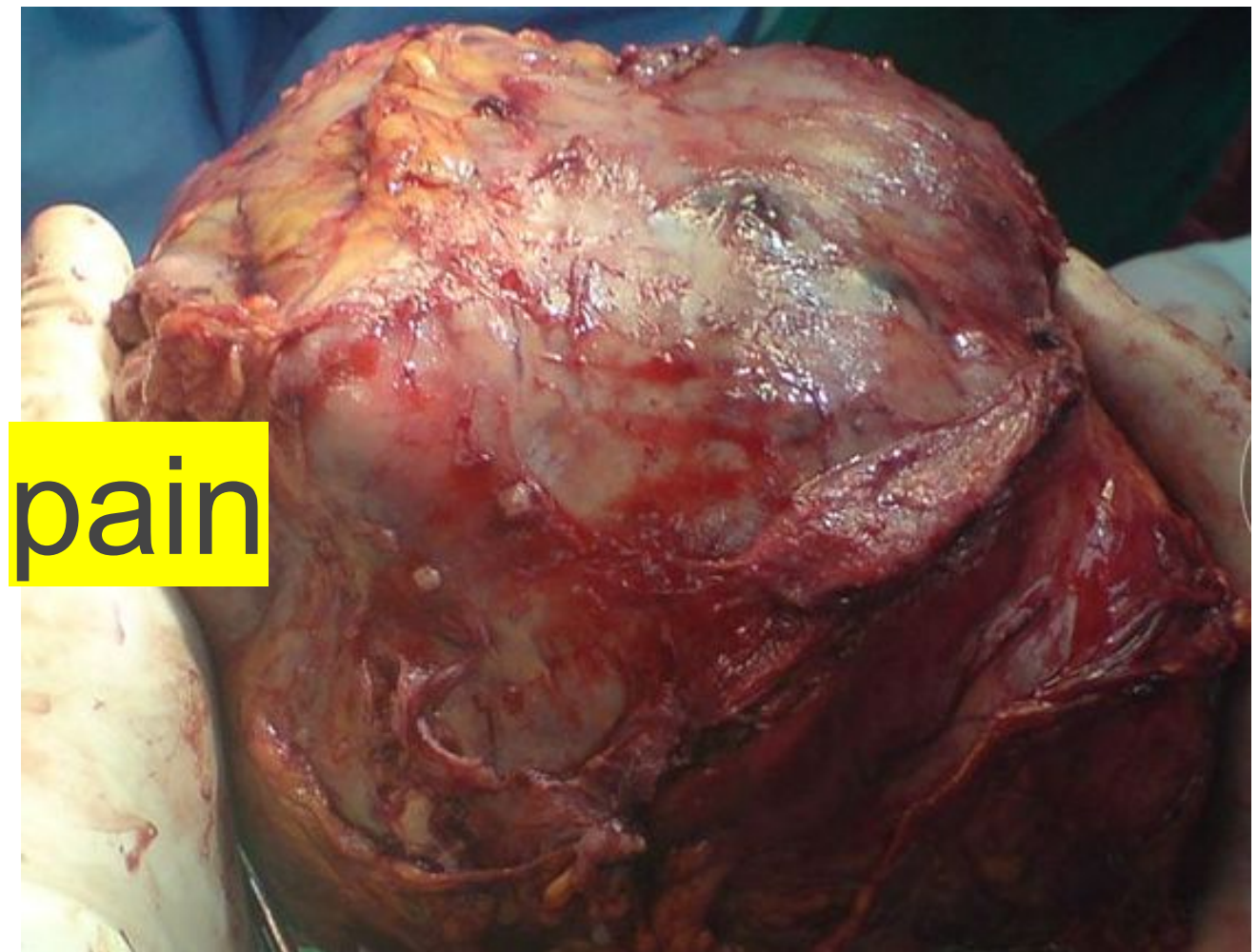
a portal spread (from alimentary tract);

b systemic blood spread (from lung, breast, testis, melanoma, etc.);

c direct spread (from gallbladder, stomach and hepatic flexure of colon)



Their presentation : vary signs/symptoms, such as jaundice and right upper quadrant pain vague signs/symptoms, such as fatigue, weight loss, and anorexia



. **Many hepatic tumors** are discovered incidentally on medical imaging studies .**Additionally**, the liver is a common site for metastasis and metastases to the liver are significantly more common than primary liver tumors.¹

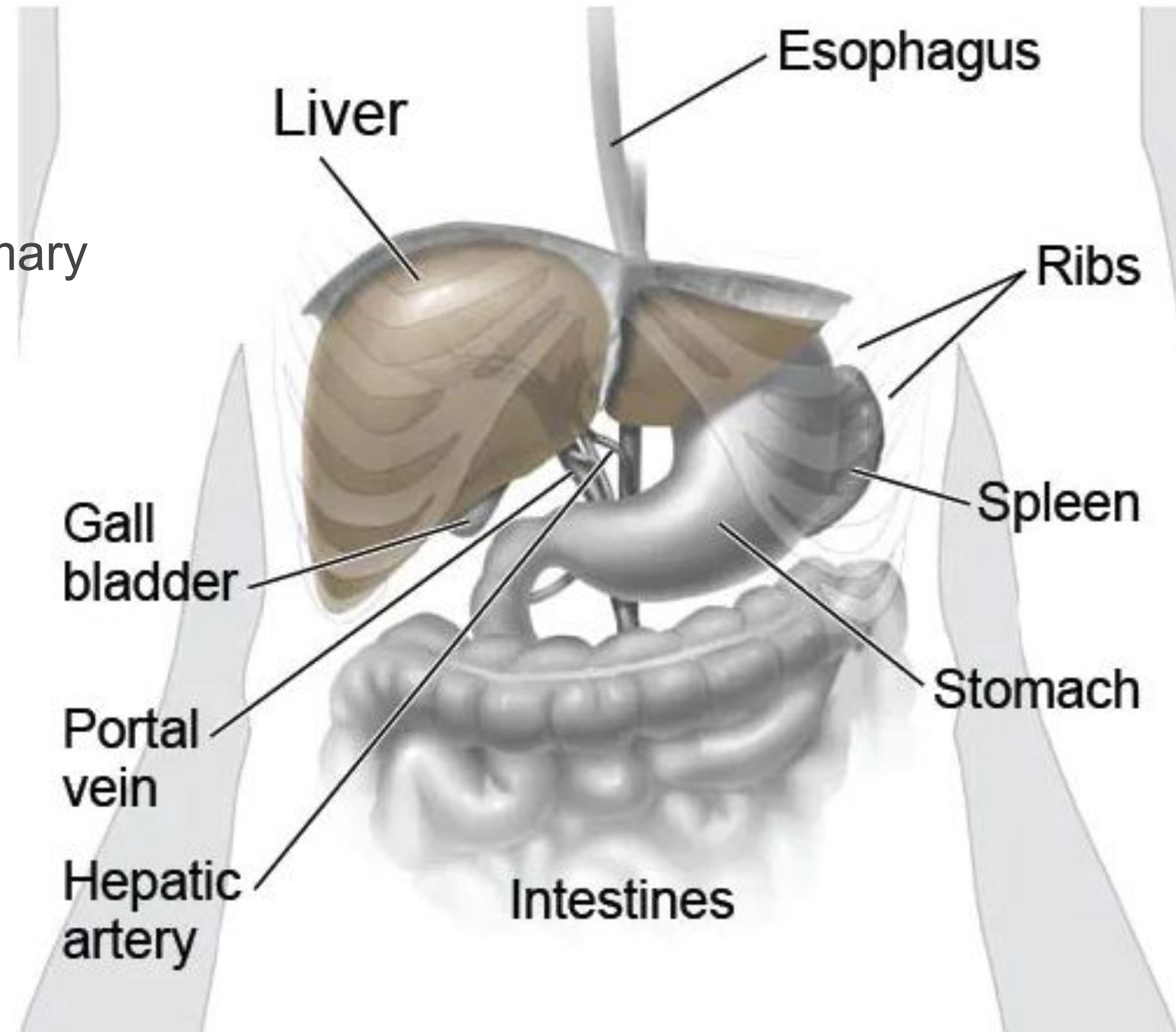
Globally, liver cancer is the **third** leading cause of cancer death after cancers of the lung and the stomach.

Common malignant liver tumors include the following:

- Hepatocellular carcinoma (most common primary malignant tumor)
- Intrahepatic cholangiocarcinoma
- Hepatoblastoma
- Angiosarcoma
- Metastases (most common malignant liver tumors)

Common benign liver tumors include the following:

- Hemangioma (most common benign tumor)
- Hepatic adenoma
- Focal nodular hyperplasia

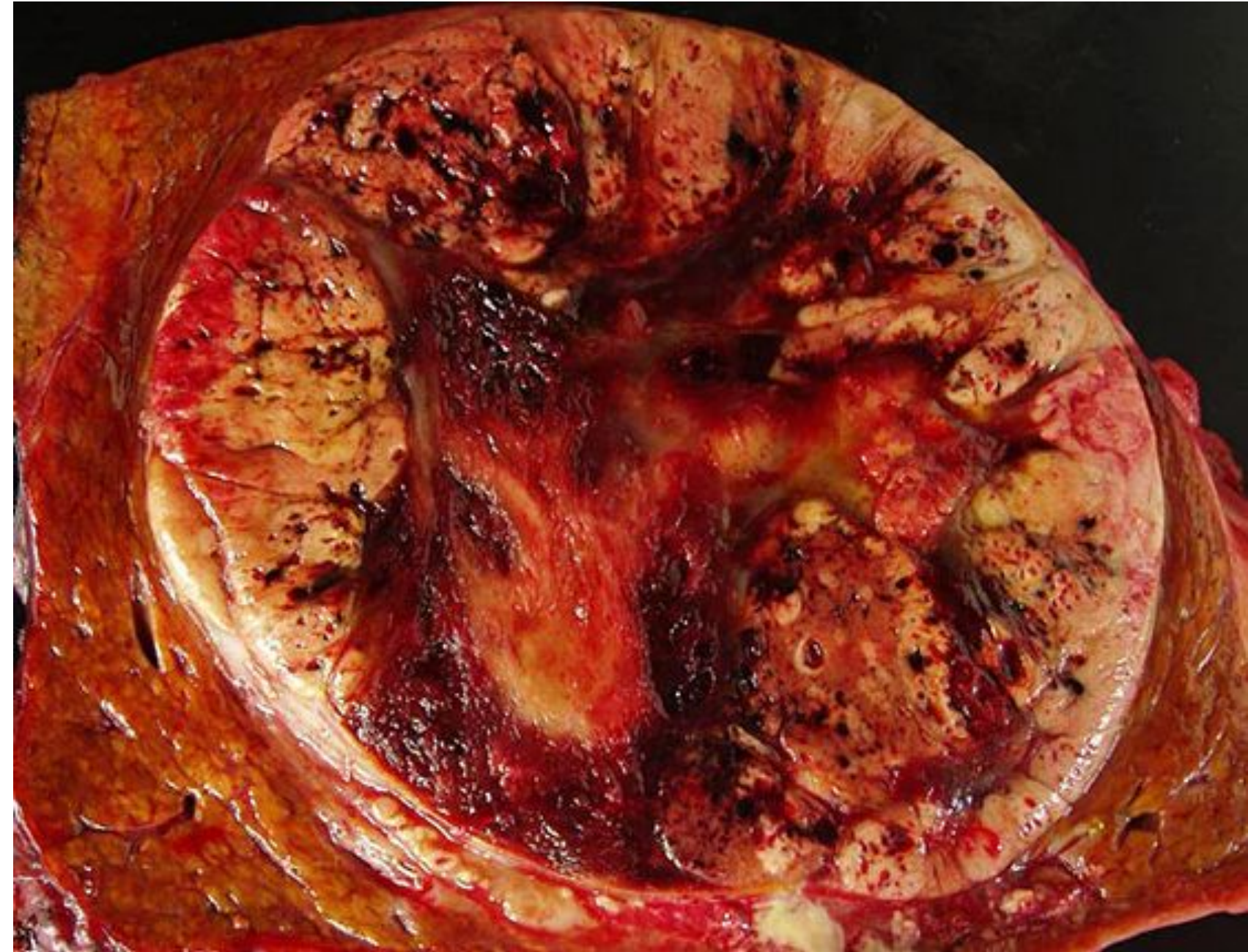


Hepatocellular Carcinoma

most common primary malignant liver tumor in adults

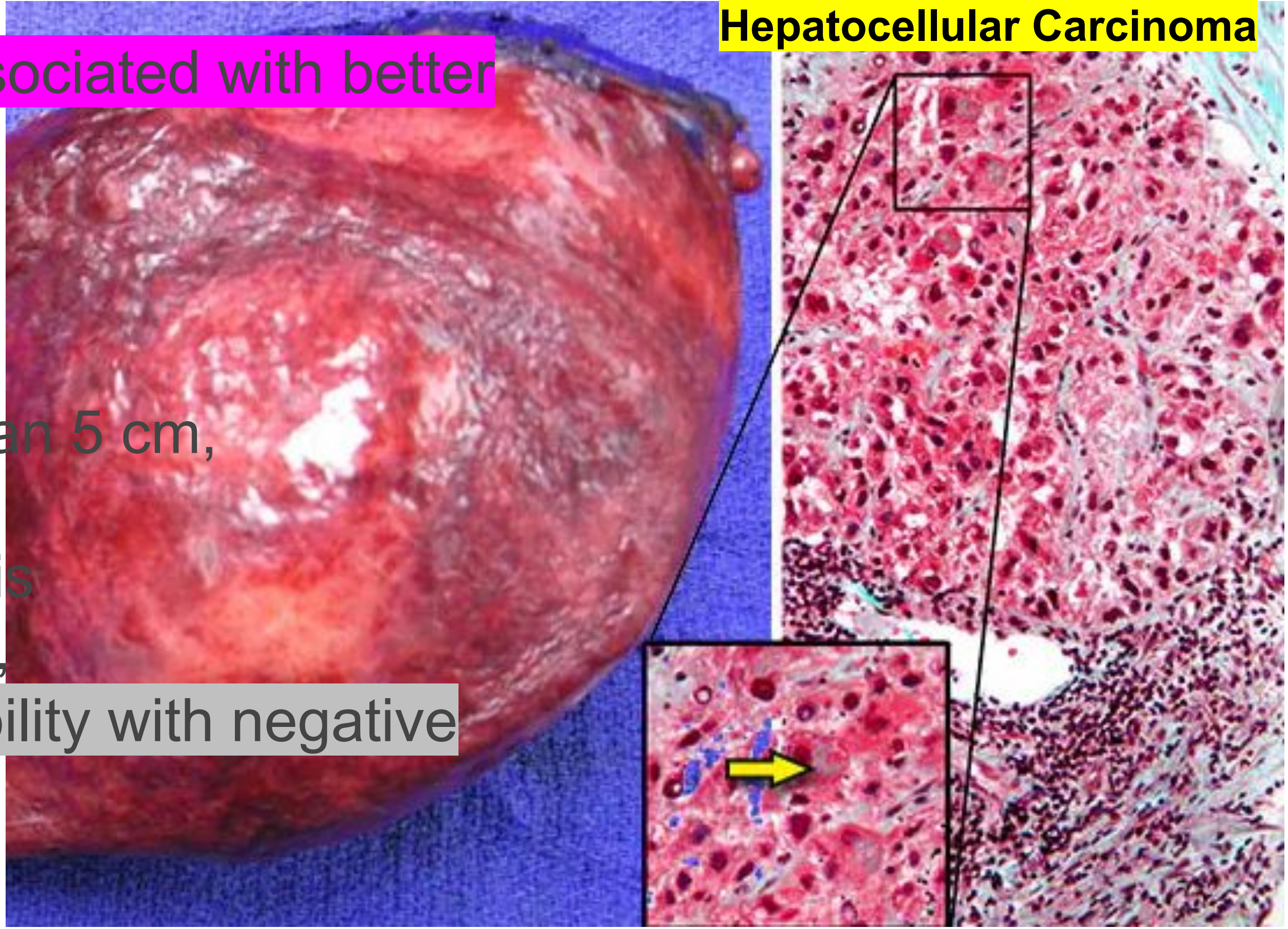
occurs predominantly in patients with underlying chronic liver disease and cirrhosis, thus, there is a strong association between the development of HCC and infection with HBV and hepatitis C virus (HCV)

Typically, the pattern of HCC spread is local expansion, but it can also metastasize via the hematogenous route and it can be multifocal. In general, these tumors are discovered either during routine screening in cirrhotic patients or when the lesions are symptomatic owing to their size or location.

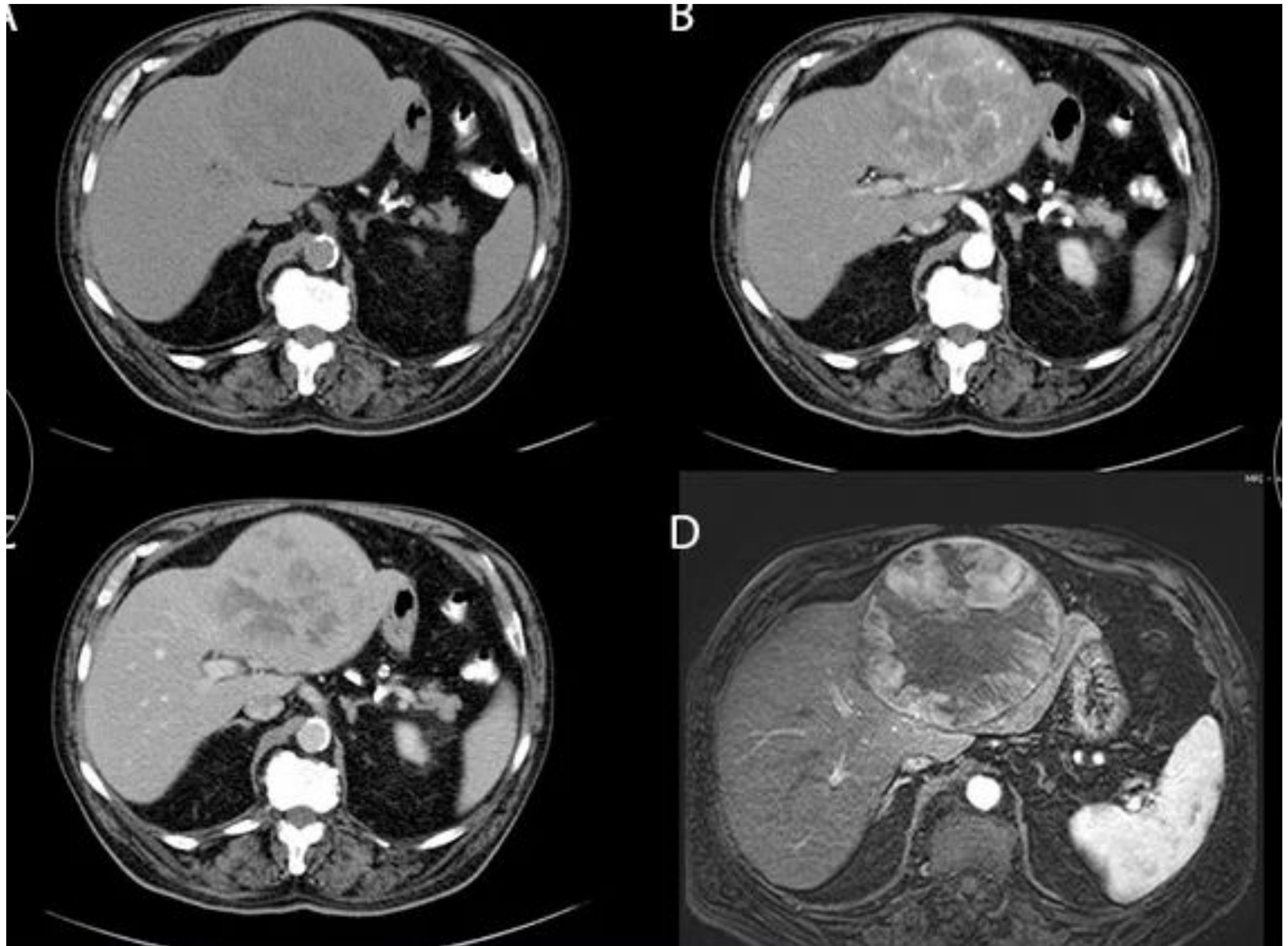


Hepatocellular Carcinoma

Favorable factors associated with better prognosis include low stage, encapsulation, solitary lesion, tumor size smaller than 5 cm, fibrolamellar variant, no underlying cirrhosis, no vascular invasion, and surgical resectability with negative margins.



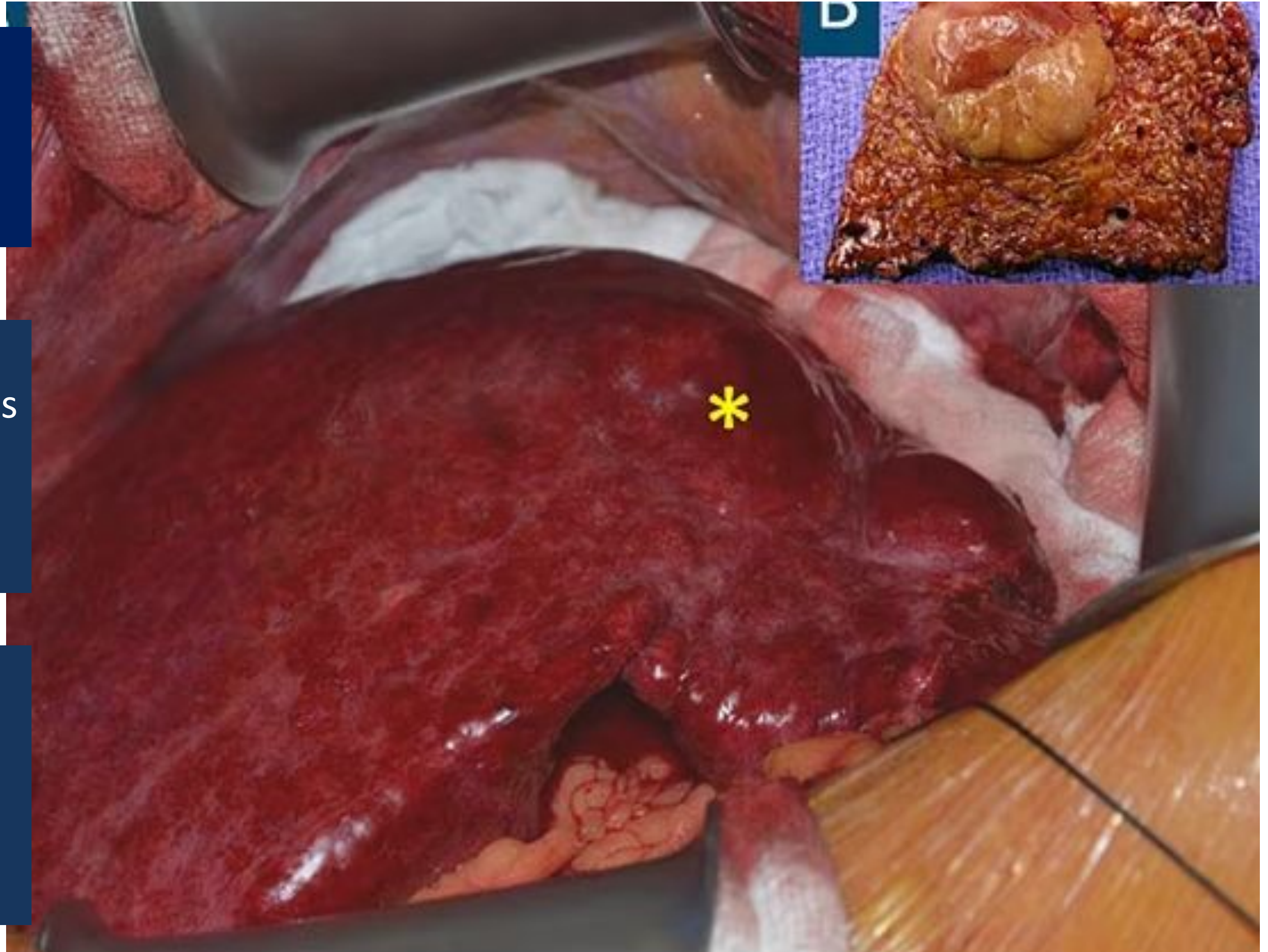
Once a diagnosis of HCC is suspected, workup should begin with patient's baseline liver function and obtaining viral hepatitis serology studies and serum alpha fetoprotein (AFP) levels. AFP levels greater than 400 ng/mL are virtually diagnostic for HCC in the setting of appropriate imaging correlates. Thus, a biopsy is not always necessary.



Liver resection is the preferred treatment in noncirrhotic patients with tumors smaller than 5 cm

Consider **liver transplantation** in patients with established cirrhosis and a single HCC lesion (≤ 5 cm in diameter) or up to three HCC lesions (all ≤ 3 cm in diameter).

Palliative chemotherapy, radiotherapy, targeted therapy, embolization, chemoembolization, or local ablative treatments



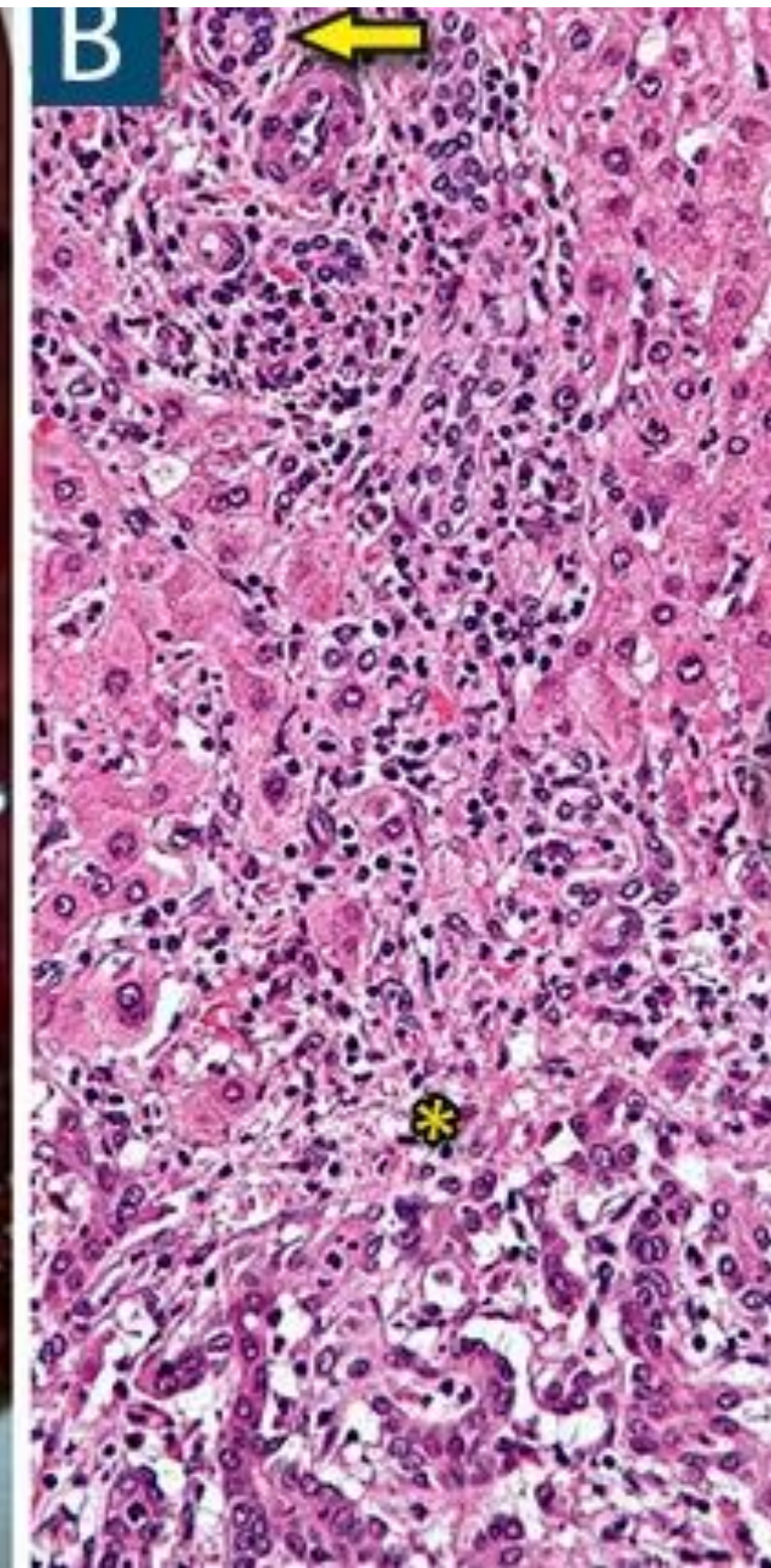
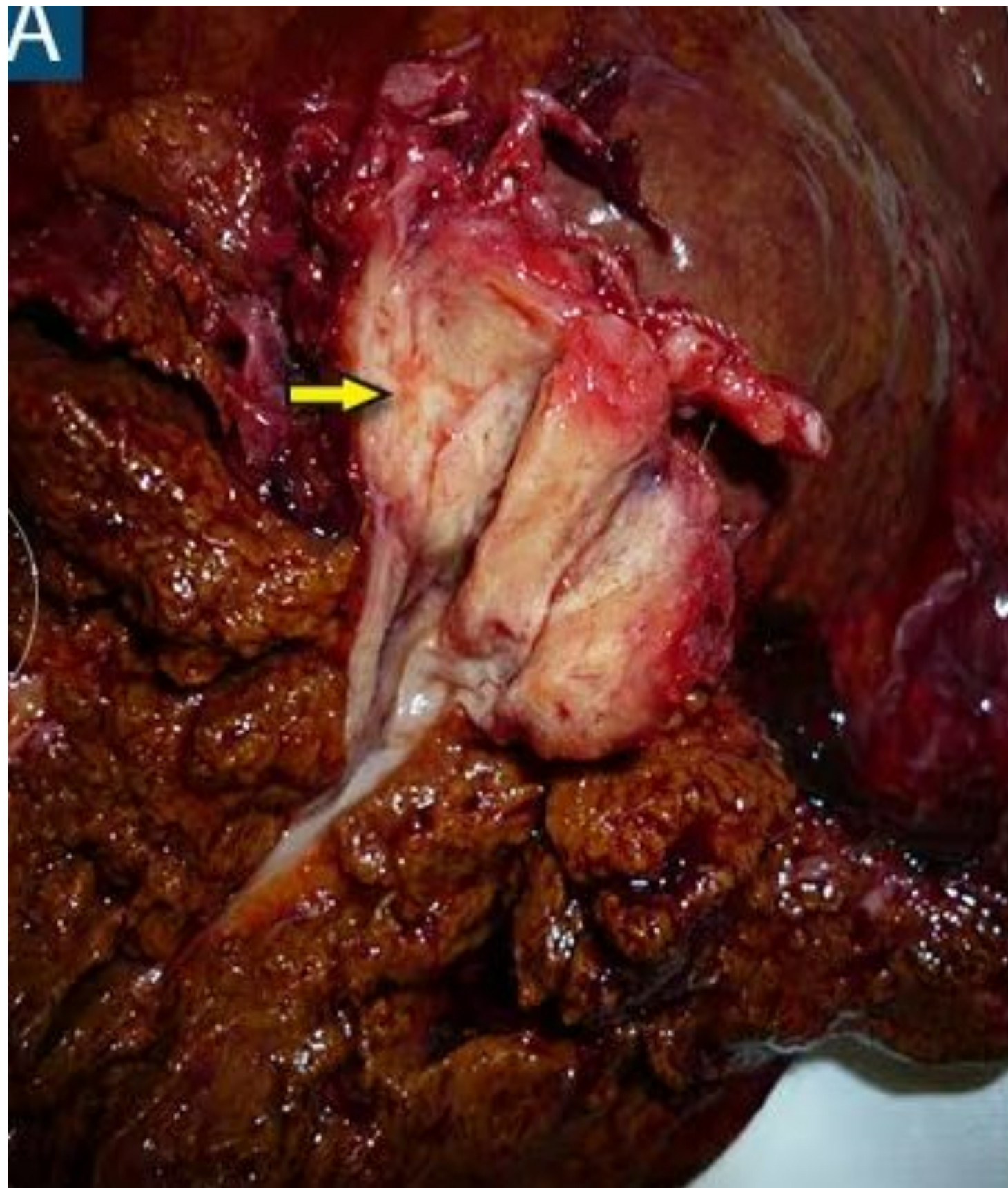
Cholangiocarcinoma

Cholangiocarcinoma, or bile duct carcinoma, is a relatively rare liver tumor that is primarily classified as an adenocarcinoma

most common risk factor being primary sclerosing cholangitis



very aggressive biology and are usually metastatic at the time of presentation

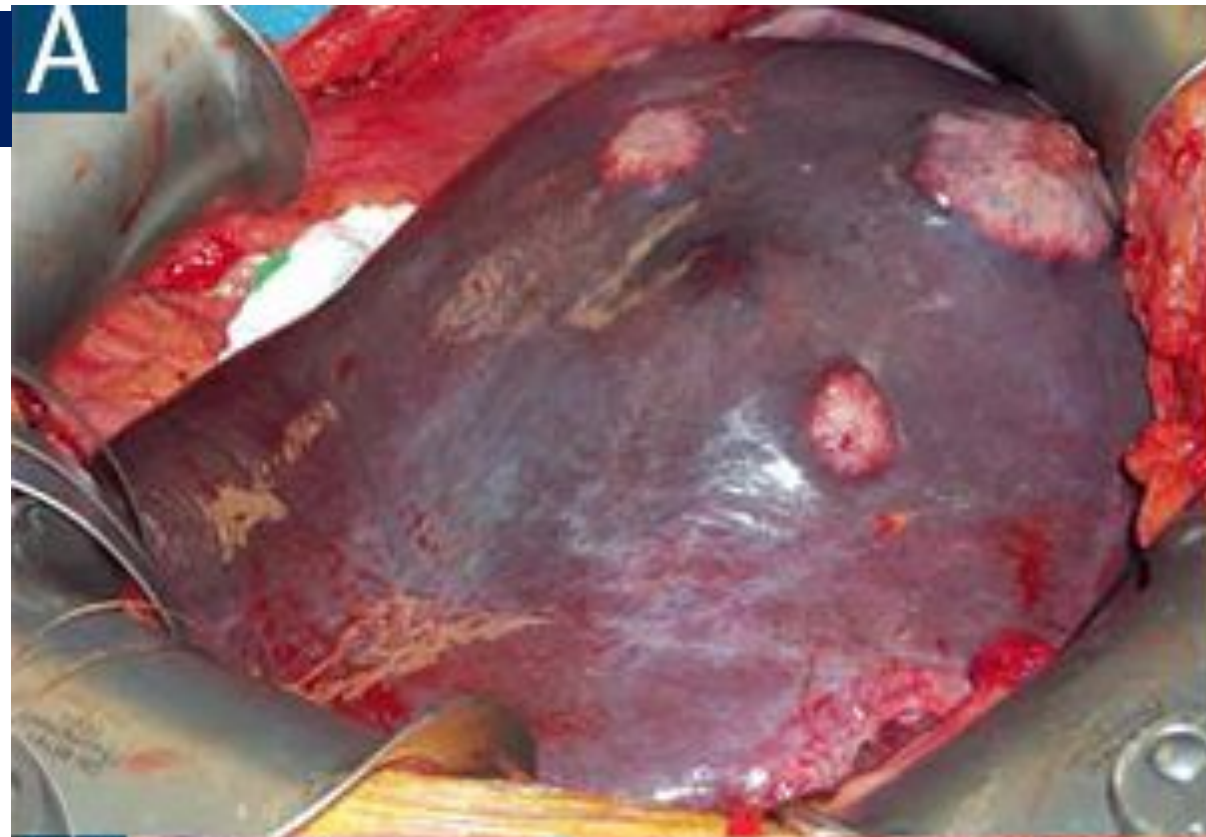


Complete surgical resection of cholangiocarcinoma is the only option for potential cure

Extragastrintestinal tumors

breast
melanomas
lung cancer

genitourinary
and gynecologic
malignancies

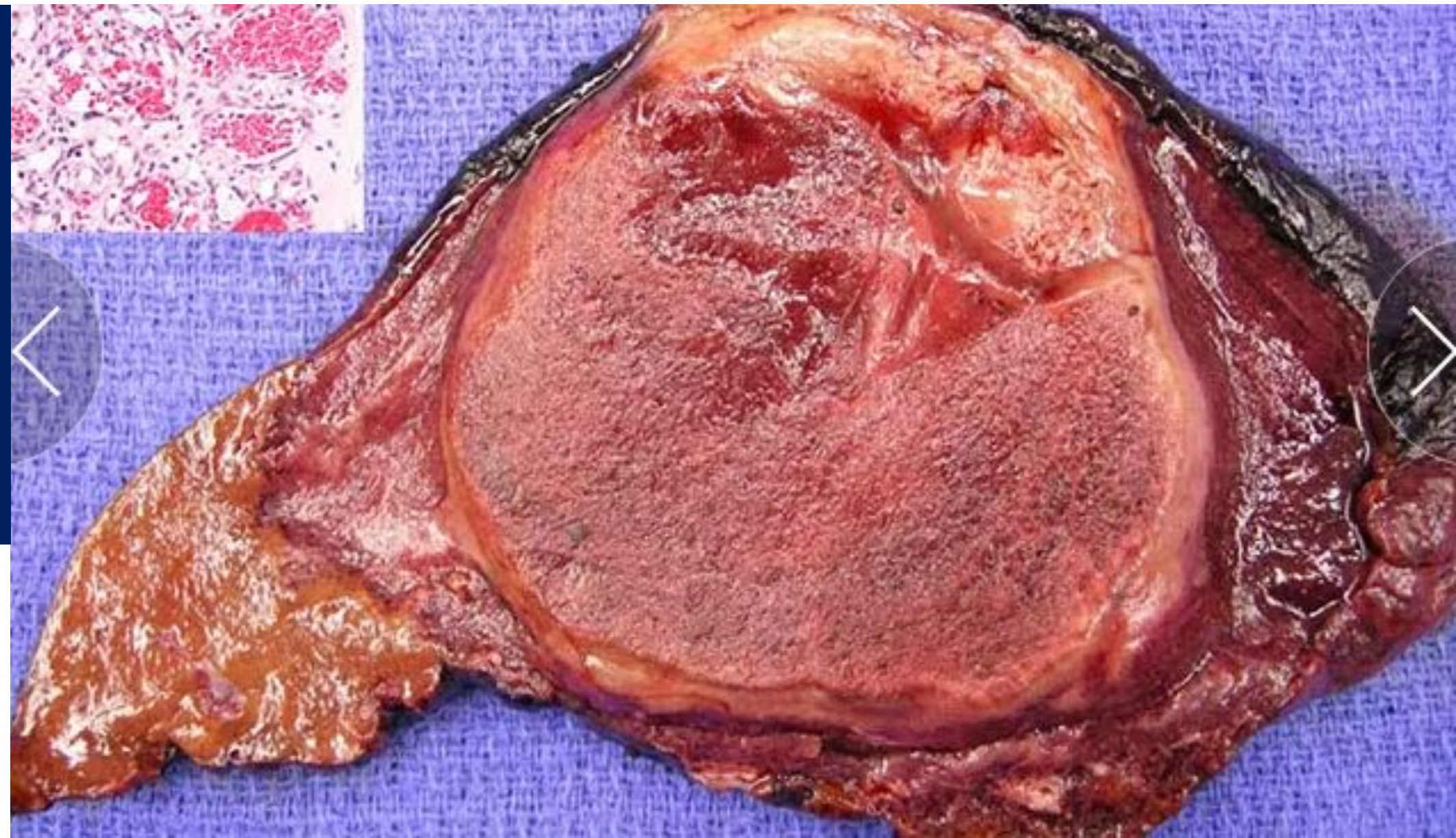


considered stage IV disease in the American Joint Committee on Cancer (AJCC) Staging System

Hepatic hemangiomas

(or, hepatic venous malformations, hepatic cavernous hemangiomas) (gross specimen shown) are the most common benign tumors affecting the liver

usually solitary, have a female preponderance.
A symptomatic



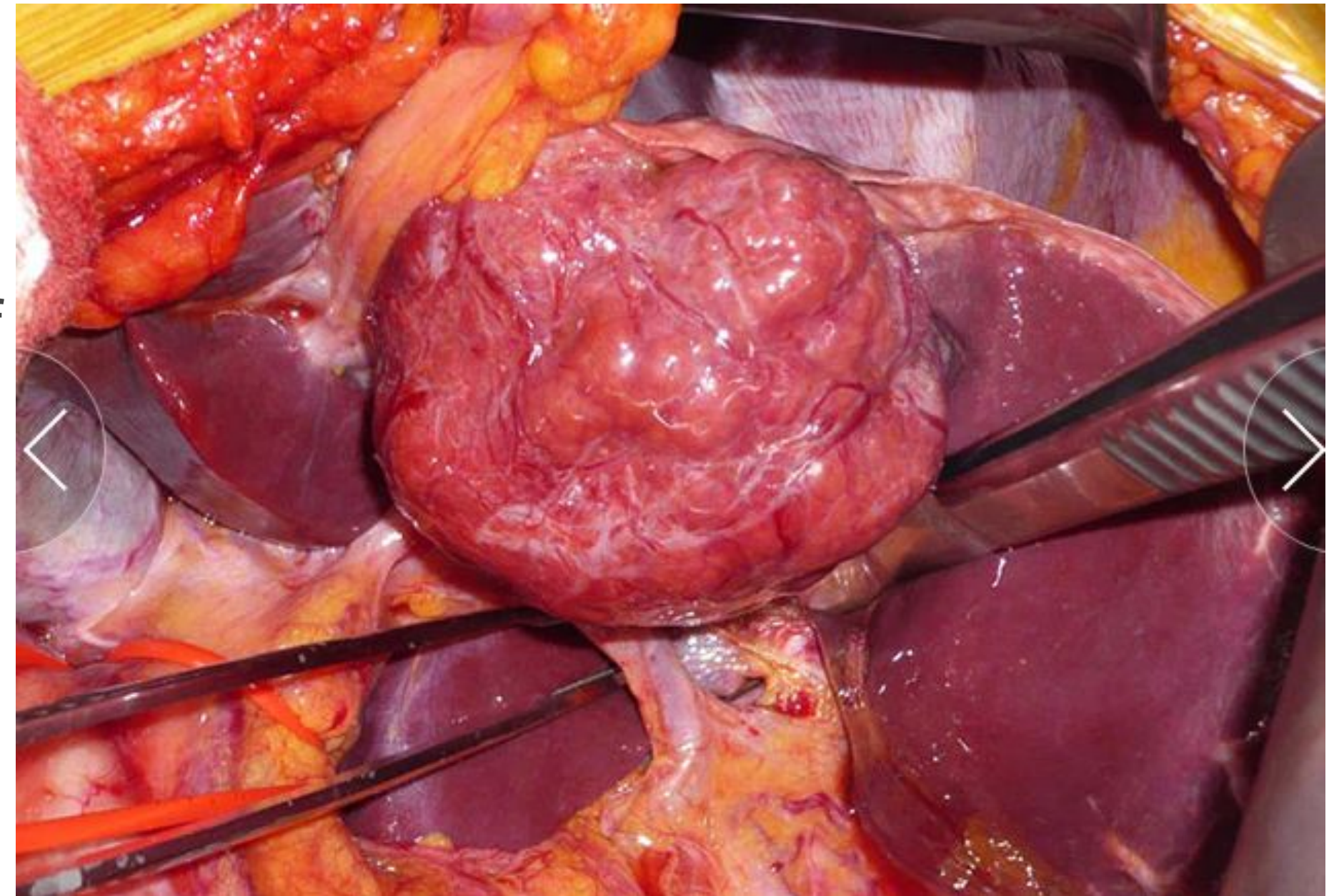
Triple-phase CT scanning or MRI can accurately characterize these tumors and differentiate them from other lesions

Due to their **benign nature and no known malignant potential**, hepatic hemangiomas generally do not require treatment

Focal Nodular Hyperplasia

the second most common benign tumor of the liver after hepatic hemangiomas

rarely symptomatic, FNH can cause abdominal pain and vague upper gastrointestinal symptoms



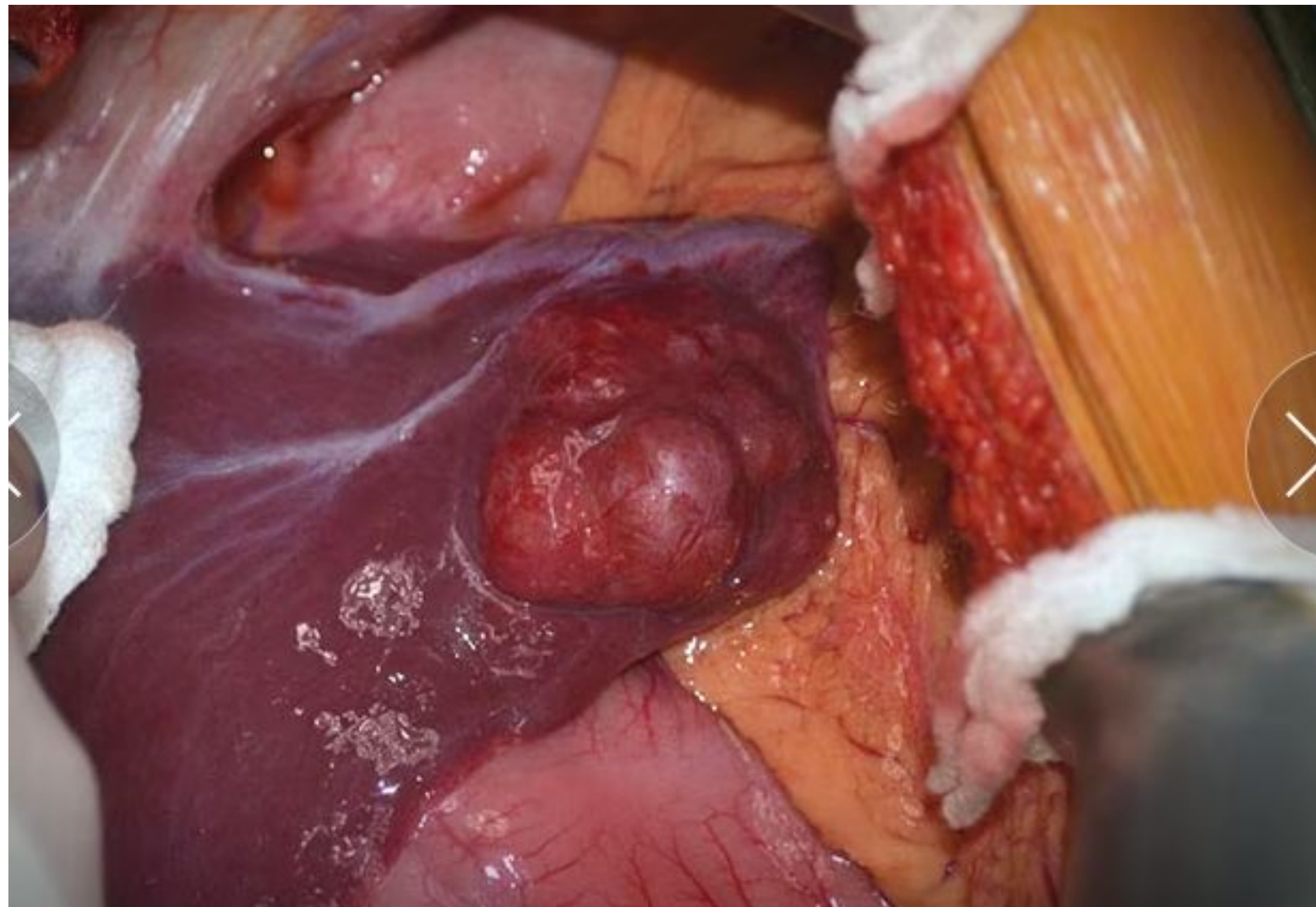
FNH does not have any malignant potential and once the diagnosis is confirmed, does not require any treatment or follow-up.

Hepatic adenoma

Adenomas are benign liver tumours seen almost exclusively in women between 25-50 years

The clinical presentation may vary from an incidental finding on imaging studies to hemoperitoneum from rupture

Surgical resection is classically indicated for symptomatic hepatic adenomas or those larger than 5 cm



potential for malignant transformation to HCC

