

Liver mass

An undefined liver mass requires further investigation. It does not always mean cancer as many benign tumors can occur within the liver. Two examples of benign liver masses or tumors include hepatoma and focal nodular hyperplasia. These may be associated with estrogen therapy such as the long-term use of oral contraceptive steroids, and therefore more commonly found in females. These tumors have characteristic features which can be clearly defined using an MRI scan of the liver.

The majority of these tumors are asymptomatic but individuals may complain of pain in the upper abdomen. Risks include rupture of the tumor causing bleeding into the abdomen. Treatment involves discontinuation of the contraceptive pill where appropriate. The majority of these tumors are treated by observation, using serial CT or MRI scans looking for any change in size or character of the tumor. Tumors may decrease in size or completely disappear when the contraceptive pill is discontinued but some tumors require surgical removal. Hepatic adenomas may rarely undergo malignant transformation.

Malignant tumors of the liver may be considered as primary, (arising within the liver) or secondary, (spread to the liver from elsewhere). A primary tumor of the liver is known as a hepatocellular carcinoma. It has a well-documented association with a number of identifiable risk factors. These include hepatitis B, hepatitis C, alcohol and hemochromatosis (a hereditary condition of excess body iron). Hepatocellular carcinoma or HCC usually arises on a background of cirrhosis. In North American Caucasians, HCC is seen in individuals with cirrhosis secondary to hepatitis C. HCC is very prevalent in the Far East, China, Taiwan, Hong, Korea, Japan and the Philippines. This is related to the high prevalence of hepatitis B in these parts of the world. Affected individuals usually have a long history of hepatitis B and here, HCC may be seen in the absence of cirrhosis.

If a primary liver tumor is identified at an early stage, it may be removed at surgery. If surgery is not an option, other methods of obliterating or at least decreasing the size of tumors are now available. These methods are effective and non-invasive (i.e. do not require an operation).

Secondary tumors are known as metastases. Common primary sites include colon, kidney and breast. These tumors may occur at the time of diagnosis of the primary tumor or may follow the diagnosis of the primary tumor by months or even years. If the metastases are solitary or small in number and confined to one section of the liver, then surgical resection may sometimes be considered. More commonly however, multiple metastases are treated with chemotherapy.