



Hepatocellular Carcinoma Fact Sheet

The Disease

Hepatocellular carcinoma (HCC), also known as primary liver cancer, is the most common form of liver cancer and is responsible for about 90 percent of the primary malignant liver tumors observed in adults.^{1,2} The prognosis for patients diagnosed with liver cancer is often poor as the disease typically does not cause symptoms until the cancer is in its later stages.³

Key Statistics

- Liver cancer is the fifth most common cancer worldwide⁴, with a five-year relative survival rate of about eleven percent in the United States.⁵
- Liver cancer disproportionately affects men, with about three times as many men developing the disease as women.⁶
- Over 600,000 new cases of liver cancer are diagnosed globally each year⁷ (19,000 in the United States⁸ and 32,000 in the European Union⁹), and in 2002 approximately 600,000 people (about 13,000 Americans and 57,000 Europeans) died of liver cancer.¹⁰
 - Liver cancer is most prevalent in Eastern and South Eastern Asia, and Middle Africa.¹⁰
 - Of the 626,000 cases worldwide, approximately 410,000 were reported in Eastern Asia (with 346,000 in China and 40,000 in Japan alone).¹⁰
 - The disease is least prevalent in Northern Europe, Central America and South Central Asia.¹⁰
- Although overall cancer incidence and mortality are decreasing in the United States, both the incidence and mortality of liver cancer are increasing.¹¹

Risk factors and Symptoms

Risk factors for HCC include:¹²

- On-going (chronic) infection with hepatitis B virus (HBV) and/or hepatitis C virus (HCV)
- Family history of liver diseases
- Cirrhosis (widespread disruption of normal liver structure by fibrosis and the formation of regenerative nodules that is caused by various chronic progressive conditions affecting the liver)
- Long-term exposure to aflatoxins
- Tobacco use
- Long-term use of anabolic steroids
- In some parts of the world, water contaminated with arsenic

Symptoms of HCC include:¹³

- Weight loss (for no known reason and without trying to lose weight)
- On-going lack of appetite
- Feeling very full after a small meal
- Swelling in the area of the stomach
- Ongoing stomach pain
- Yellow-green color to the skin and eyes (jaundice)
- Becoming sicker if you have chronic hepatitis or cirrhosis

Treatment

- Treatment options for HCC depend on the stage of the malignant disease, underlying liver function and the patient's overall condition.¹²
- Surgery offers the only chance to cure liver cancer. If the cancer is found at an early stage and the rest of the liver is healthy, surgery with or without liver transplantation may be curative. However, only about 15 percent of patients have resectable disease.¹⁴
- Four standard treatments are used to treat liver cancer.¹³
 - Surgeries include cryosurgery to freeze and destroy abnormal tissue; partial hepatectomy, or a removal of the part of the liver where cancer is found; total hepatectomy and liver transplant; and radiofrequency ablation, in which a special probe with tiny electrodes is used to kill cancer cells.¹³
 - Radiation therapies use high-energy X-rays or other forms of radiation to kill cancer cells.¹³
 - Systemic and regional chemotherapies can be taken by mouth or injected into the body. Chemoembolism, a treatment that delivers chemotherapy directly to the area of the liver that contains the cancer, is also being studied as a liver cancer treatment.¹³
 - Percutaneous ethanol injection uses a small needle to inject ethanol directly into a tumor to kill cancer cells.¹³

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