Hepatocellular Carcinoma

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Hepatocellular carcinoma (HCC) is the most common cancer originating from the liver. Hepatocellular carcinoma is the 13th most common cancer. It is estimated that there are currently approximately 67,000 patients living with HCC in the United States. It is estimated that about 40,000 new cases of HCC will be diagnosed in 2017 which makes up about 2.5% of all new cancer diagnoses.

The likelihood of survival depends on how far the tumor has spread before initiation of therapy and on the response to therapy. Unfortunately, about 29,000 of the estimated 67,000 patients currently living with HCC are estimated to die this year. While the survival rate has improved with advances in diagnostic capabilities and treatment regimens, the overall survival rate is still quite low at 17.6% over five years.

What Is Hepatocellular Carcinoma?

Hepatocellular carcinoma (HCC) is the most common cancer originating from the liver. It primarily affects patients with long-standing liver disease from viruses, alcohol and fatty liver. The chart below shows the age distribution of liver cancer.

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent of New Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>6.8%</td>
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<tr>
<td>20-34</td>
<td>0.7%</td>
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<tr>
<td>35-44</td>
<td>1.8%</td>
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<tr>
<td>45-54</td>
<td>13.3%</td>
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<tr>
<td>55-64</td>
<td>37.0%</td>
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<tr>
<td>65-74</td>
<td>24.3%</td>
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<tr>
<td>75-84</td>
<td>16.2%</td>
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<tr>
<td>&gt;84</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

What are symptoms of liver cancer?

- Discomfort in the upper right abdomen.
- A swollen abdomen.
- Jaundice (yellowing of the skin and whites of the eyes).
- Easy bruising or bleeding.
- Loss of appetite or feelings of fullness after small meals.
- Unintentional weight loss.
- Pale, chalky bowel movements and dark urine.

If you have liver disease or have risk factors for liver disease and develop these symptoms, please make sure to discuss these with your primary care provider and/or hepatologist.

Can I prevent myself from getting liver cancer?

Many cases of HCC can be prevented by limiting exposures to known causes of long standing liver disease:

- Vaccination against Hepatitis B can **decrease your risk 20 fold**.
- Avoiding sharing/dirty needles can prevent Hepatitis C. If you were born between 1945 and 1965, you should be screened for Hepatitis C. Oral medications can help eradicate the virus. This can decrease your risk **25 fold**.
- Alcohol intake should be limited to 2 drinks a day for men and 1 drink a day on average for women.
- Maintaining a healthy active lifestyle with regular exercise and a well-balanced diet can help prevent blood sugar and triglyceride elevations which can be associated with fatty liver disease. This can decrease your risk **8 fold**.
- If you have a genetic or autoimmune condition which predisposes you to liver disease, regular follow-up visits with your doctor and compliance with medications can help prevent the development of HCC.

How is liver cancer diagnosed?

Most commonly, **hepatocellular carcinoma be will be diagnosed based on imaging and clinical history**. Your physician may order an ultrasound to evaluate for any obvious lesions but an MRI or CT scan will usually be needed to confirm the diagnosis. Only rarely is a liver biopsy required.

How is liver cancer treated?

The treatment of HCC varies greatly depending on the stage, tumor characteristics, and transplant candidacy of the patient. Treatment can consist of curative surgical resection, injection of toxic substances adjacent to the site of cancer, chemotherapy, liver transplant or some combination of the previously mentioned therapies. The ideal treatment regimen should be **individualized by a hepatologist and a medical oncologist**.

What is the prognosis with HCC?

The likelihood of survival depends on how far the tumor has spread before initiation of therapy and on the response to therapy. Unfortunately, about 29,000 of the estimated 67,000 patients currently living with HCC are estimated to die this year. While the survival rate has improved with advances in diagnostic capabilities and treatment regimens, the **overall survival rate is still quite low at 17.6% over five years**.

Recent advances in liver cancer

New studies are identifying new molecular mechanisms and receptors involved in hepatocellular carcinoma. Using this information, scientists are developing new chemotherapy medications and nanoparticles which are able to more precisely target cancer cells while limiting side effects.