

## **Hepatitis C**

Hepatitis C is an inflammation of the liver caused by a virus. It is an infectious disease and the most prevalent liver disease in the world. As soon as the virus has entered the human body, it multiplies in liver cells causing the cells to burst. In a few cases, the body is able to eliminate the virus by itself. But up to 80% of individuals become chronic carriers of the virus, which can lead to liver damage. The liver inflammation caused by the hepatitis C virus is often detected very late. Long-term effects of being hepatitis C positive include the development of liver cirrhosis and liver cell carcinoma (hepatocellular carcinoma) after 20 to 30 years of infection. Hepatitis C is a leading indication for liver transplants.

The hepatitis C virus is spread through contact with infected blood, most commonly through intravenous drug abuse (sharing drug needles, spoons...). Contact with very small amounts of infected blood, for example through sharing a toothbrush or razor, is enough to cause an infection. Infection can also occur through unprotected sex. There have been some cases documented in which a mother infected her baby during birth; however, this seems to be a seldom occurrence. Normal social contacts, such as shaking hands, hugging and kissing, are not infectious. The diagnosis is only possible through a blood test for virological parameters (Hepatitis C antibodies, Hepatitis C PCR and – if positive – “genotyping”).

The only effective treatment at this time is the administration of a combination of Interferon alpha and Ribavirin over a longer period of time. Interferon alpha is a substance that is also produced by the human body that both helps cells to protect themselves against the virus and reinforces the immune system. It is available in ampule form and must be injected subcutaneous once a week by the patient him/her self. Ribavirin tablets are taken orally twice daily. The physician treating the patient sets the dose depending on various factors. The treatment last for at least six months but depends to some extent on the genotype of the virus.

Depending on the genotype, 50-80% of patients are virus free after this treatment. Other factors that influence the response to treatment include age, sex, and the amount of virus and liver damage present before treatment. There are several different side effects that

can occur during this therapy so it is important for the physician to observe the patients carefully for their occurrence. Some well-known side effects of this therapy are flu-like symptoms, changes in the white and red blood count, pruritus, and psychiatric symptoms, which can range from mood swings to clinical depression, which should be treated. To minimize complications, patients should be well informed and guided by an experienced physician during the whole treatment period. After the end of the therapy, virological parameters in the blood should be controlled regularly.