



PINNACLE
CLINICAL RESEARCH

What Is NASH?



Non alcoholic steatohepatitis, NASH, is the severe form of a chronic liver disease : Non Alcoholic Fatty Liver Disease (NAFLD).

This progressive liver disease comes from the accumulation of abnormal amount of fat in the liver. It is called “non alcoholic” because the patients affected by NAFLD or NASH drink less than 3 drinks per day for men, and less than 2 drinks per day for women.

The excess of fat will lead to inflammation of the liver, and to liver cell injury. These lesions of the liver can be seen under a microscope with a liver biopsy. This condition may lead to advanced fibrosis, which is the scarring of the liver. The liver will not be able to function normally when the fibrosis becomes too severe. Fibrosis can progress to cirrhosis, in which the extent of the scar tissue does not allow the liver to function properly. Once cirrhosis has developed, serious complications may occur, including liver failure, liver cancer, or the need for a liver transplant. More than just the liver complications, the major health complication for NASH patients is cardiovascular disease.

NASH is a silent disease, because most patients with NASH do not feel any symptoms. This is why many patients do not know they have NASH, until the disease has progressed to very advanced stages. Sometimes patients experience pain in the upper right part of their abdomen.

Causes of NASH and Risk Factors

NASH is the most common chronic liver disorder in industrialized countries, affecting around 15% of the US adult population.

NASH is the consequence of sedentary lifestyle, and is associated with excess fat and excess sugar diets. NASH has more than doubled in the last 20 years due to the epidemic of diabetes and obesity, in link with unhealthy lifestyle (fatty foods, excess carbohydrates, drinks rich in sugar/fructose). NASH is expected to become the leading cause of liver transplant in the US in the coming years.

Some patients are more at risk of having NASH, because they have risk factors for this condition. The risk factors include age, overweight and obesity, type 2 diabetes, hypertension, altered lipid levels. Patients with NASH have a greater risk of cardiovascular complications.

Diagnosis of NASH

The only way to diagnose NASH is to perform a liver biopsy, and look at the liver tissue under the microscope, to identify the lesions of the liver. Other techniques to evaluate the damage of the liver are blood test and imaging techniques.

If you have the risk factors for NASH:



**Overweight
or Obesity**



**High LDL
Cholesterol**



**Low HDL
Cholesterol**



**High
Triglycerides**



**Type 2
Diabetes**



**Insulin
Resistance**



Hypertension



**High Liver
Enzymes**

Do not hesitate to go to a specialist liver doctor (hepatologist) for further screening of your liver. The specialist may perform more exams, including lab tests to check your liver function, ultrasound, scan with MRI, and more specialized imaging techniques. The hepatologist may order a liver biopsy in order to make the definitive diagnosis of NASH and to stage the severity of your disease.

Treatment of NASH

Currently there are no approved treatments for NASH. The best way to keep NASH from worsening is to modify your dietary and lifestyle habits. Additionally, good control of the associated conditions such as diabetes, lipid abnormalities, hypertension will help to slow the worsening of NASH.

Contact Us:
