



Fatty Liver disease

What is Fatty Liver disease?

Nonalcoholic steatohepatitis (NASH) is a condition characterised by inflammation and the accumulation of fat and fibrous tissue in the liver. Although similar findings can be seen in patients who abuse alcohol, NASH occurs in people who do not drink. The exact cause of NASH is unknown. However, it is seen commonly in people with certain medical conditions such as diabetes and obesity. It is diagnosed in about 10% of people who have a liver biopsy. Most affected people are between the ages of 40 and 60 years, although the condition can also occur in children over the age of 10 years. NASH is seen more often in women than men. Fatty liver is typically a chronic condition. Most people with this condition will not develop serious liver problems. On the other hand, in others the condition can lead to progressive scarring and cirrhosis. Cirrhosis is the term used to describe a diseased liver that has been severely scarred. Unfortunately, it is difficult to predict the natural course of Fatty liver in individual patients.

Why have I developed Fatty Liver Disease?

- ◆ **Obesity**—70% of people with Fatty liver are upto 40% overweight.
- ◆ **Diabetes**—75% of people with Fatty liver have diabetes mellitus.
- ◆ **Hyperlipidemia**—Upto 80% of people have high triglyceride and/or cholesterol levels
- ◆ **Insulin resistance**—Refers to a state in which the body does not respond adequately to insulin

What drugs should I avoid?

Several drugs used to treat medical conditions have been linked to fatty liver, including Amiodarone, Tamoxifen, Ca+ channel blockers, tetracyclines, perhexilene, glucocorticoids, synthetic estrogens, Valproate, chloroquine, and pesticides

What symptoms can I expect?

Most people with Fatty liver have no symptoms. Rarely, Fatty liver is diagnosed after patients consult their doctor because of fatigue, a general feeling of being unwell, and vague discomfort in the upper right abdomen.

How is Fatty Liver diagnosed?

Fatty liver is most often discovered during routine laboratory testing. Additional tests help confirm the presence of Fatty liver and rule out other types of liver disease. An ultrasound or CT scan is also a common method of detection. However, these scans often fail to detect accumulation of fibrous tissue or inflammation and cannot differentiate Fatty liver from other causes of liver disease that can have a similar appearance.

What do my Liver function tests reveal?

Liver function tests determine blood levels of substances produced by the liver. They can be helpful for diagnosing Fatty liver and for differentiating it from alcoholic hepatitis. Levels of two liver enzymes (aspartate aminotransferase [AST] and alanine aminotransferase [ALT]) are elevated in 90% of people with Fatty liver; ALT/AST ratio is usually >1

Is a Liver biopsy needed?

Although other tests may suggest that a person has Fatty liver, a liver biopsy is the only test that can definitely confirm or rule out the presence of Fatty liver. During a liver biopsy, small samples of liver tissue are collected and sent to the laboratory for microscopic examination and biochemical testing. A liver biopsy is also helpful for determining the severity of Fatty liver, and in some cases, it may also provide clues about the future course of the condition.

What treatment I available? At this time, there are no cures for Fatty liver. The main goal of treatment is to:

- ◆ **Treat high cholesterol, and diabetes,**
- ◆ **Avoid alcohol and drugs** that may effect the liver.
- ◆ **Weight reduction** (approximately 10%) Xenical and weight loss drugs may help
- ◆ **Diet (Low carbohydrate, High Protein diet) avoiding high glycaemic (glucose) foods**
- ◆ **Omega 3 fatty acids 1000mg daily (Fish oil capsules)** have been shown to improve insulin resistance
- ◆ **Vitamin E 1000 units daily** may improve Liver function tests
- ◆ **Vitamin C 1000 mg daily**
- ◆ **Silymarin (Milk Thistle)** May be beneficial although cannot be routinely recommended.
- ◆ **Alpha Lipoic acid 600mg daily** can also help
- ◆ **Metformin** at 500mg bd if signs of elevated glucose are present

What are the longterm risks?

The good news is that in most people, fatty liver appears to be a stable medical condition. The results of one study showed that people with fatty liver live just as long as people without this condition. However NASH can progress in some people due to progressive fibrosis and eventual cirrhosis. This is seen in about 20% of people after 20 years.