

### **Clinical signs and laboratory tests to diagnose fatty liver and liver inflammation (NASH)**

- Clinical symptoms – Unfortunately, as outlined above, fatty liver and early liver inflammation, does not produce significant symptoms. Some individuals may feel right upper quadrant pain and lack of vitality. However, the presence of abdominal obesity, Metabolic syndrome, and Type 2 diabetes are warning signs that fatty liver is present.
- Lab testing – Tests of liver functions usually remain normal when there is only fatty liver or early phase of inflammation (NASH). Liver function tests include:
  1. Liver Enzymes – ALT and SGPT (also called SGOT and SGPT)
  2. Albumin levels
  3. Bilirubin levels
  4. Clotting factor tests.
  5. High uric acid levels (associated with fatty liver and suggest a high risk of liver inflammation - NASH)
- Radiological tests – Ultrasound, CT Scan, and MRI

The ultrasound is the simplest and cheapest test of all radiological tests. An ultrasound examination will diagnose fatty liver only when the liver cells have more than 30% fat. This test will not detect the inflammation process in the liver (NASH). Detection of liver inflammation (NASH) and liver scarring (Cirrhosis) requires specific radiological tests and liver biopsy.