



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A HOMOEOPATHIC GUIDE TO NON-ALCOHOLIC FATTY LIVER DISEASE

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ABSTRACT:

Liver is the second largest organ in the Human body. Almost all the metabolic processes takes place in liver including fatty acid metabolism. Normally, the liver store's some amount of fat, but if its accumulation leading to increase in weight of liver by 5% to 10% of normal liver weight then it is called as fatty liver (steatosis). Fatty liver is of 2 types, they are Alcoholic Fatty liver disease and Non-alcoholic fatty liver disease.² Liver related mortality has been increased now a days, it being the 3rd most common cause of death after Cardio vascular diseases and the Extra-Hepatic Malignancy. As there is no standardized treatment for fatty liver, by treating the underlying cause we can reverse the abnormal changes in the liver, when the disease is in it's early stage. These metabolic dysfunctional activities can be corrected by the help of homoeopathic medicine which can help to reverse the condition of fatty liver & bring it back to normal when it is prescribed based on symptom similarity.

KEY WORDS:

- Fatty liver
- Fibrosis
- Cirrhosis
- General management
- Repertorial Approach
- Homoeopathic medicine

INTRODUCTION:

Fatty liver [Steatosis] is abnormal accumulation of triglycerides within cytosol of the parenchymal cells of liver.

Due to increase in sedentary lifestyle changes and change in diet habits, there is increase in prevalence of obesity and insulin resistance worldwide. Fat accumulation in the liver is a common finding during abdominal imaging studies.

Non-alcoholic fatty liver disease is seen in patients with absence of high alcohol consumption, typically, a threshold of <20 g/day for women and <30 g/day for men.¹Increase in incidence of obesity in children and

adults, sedentary lifestyles, consumption of junk food, and old age are some of the likely contributors of NAFLD.

The prevalence of it is estimated to affect 20–30% of the general population in Western countries, 80-90% in Obese adults, 30-50% in patients with Diabetes mellitus, 90% or more in patients with hyperlipidaemia, 3-10% in children, and high as 40-70% among obese children.⁷

ETIOLOGY:

Non-alcoholic fatty liver disease is strongly associated with Obesity, Dyslipidaemia, Type 2 diabetes mellitus, Insulin resistance and Hypertension. Hence, it is considered by many to be the hepatic manifestation of the 'metabolic syndrome'. Other causes are Family history, Tamoxifen, amiodarone, and exposure to certain petrochemicals.¹

PATHOPHYSIOLOGY

The following are some possible pathophysiological processes for fatty liver:

- 1) Decreased mitochondrial fatty acid beta - oxidation with inadequate very low - density lipoprotein incorporation or export of triglycerides (VLDL).
- 2) Increased endogenous fatty acid synthesis.
- 3) Decreased hepatic fatty acid supply.
- 4) Imbalance in procoagulants advances from steatosis to Metabolic cirrhosis in non-alcoholic fatty liver disease, which may be caused by an increase in factor VIII and a decrease in protein C. The researchers theorize that this imbalance would affect the risk of cardiovascular disease and liver fibrosis, two illnesses that are frequently linked to NAFLD.⁹

NAFLD includes a spectrum of progressive liver disease ranging from fatty infiltration alone (steatosis) to fatty infiltration with inflammation (Non-alcoholic steatohepatitis, NASH) and may progress to cirrhosis and primary liver cancer

STAGES OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD):

NAFLD develops in 4 main stages, most of the people will only ever develop the first stage, usually without realizing it.

In few cases, it can progress and eventually lead to liver damage if not detected and managed.

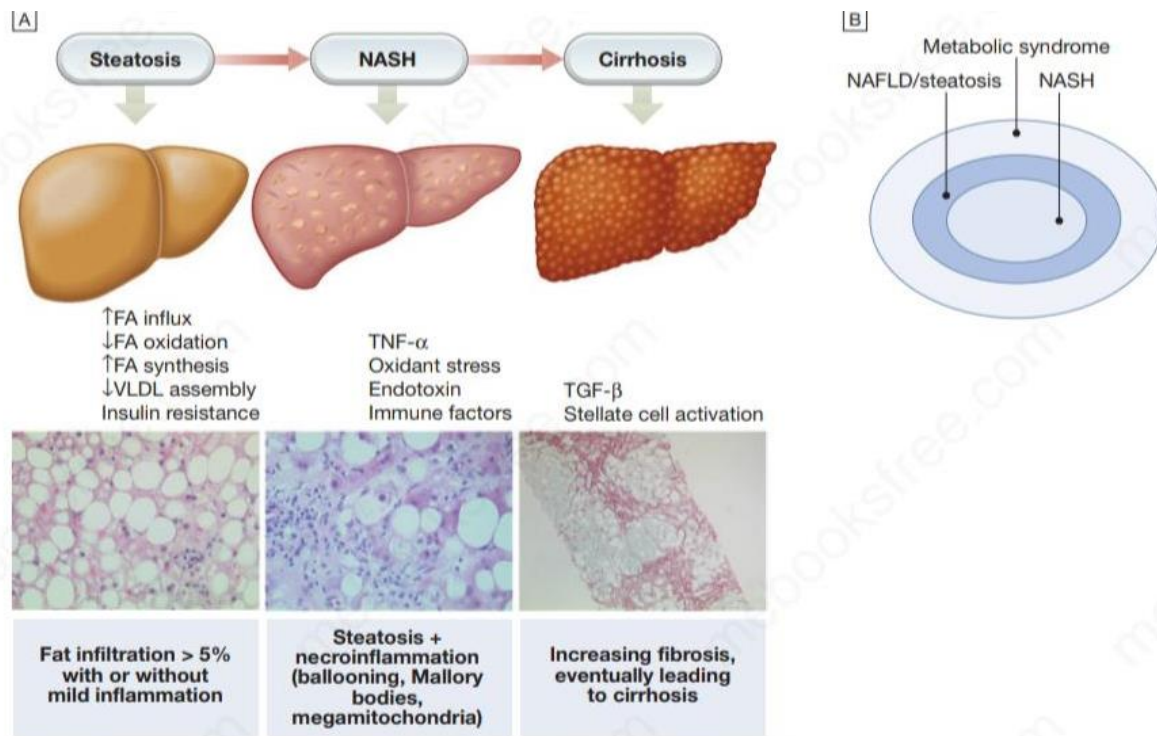
The main stages of NAFLD are:

1.Simple Fatty Liver (Steatosis): A largely harmless build-up of fat in the liver cells, no hepato cellular ballooning, no fibrosis; that may only be diagnosed during tests carried out for another reason.

2.Non-Alcoholic Steatohepatitis (NASH)/ Fibrosis: Massive steatosis with indications of hepatocyte injury; inflammation, ballooning degeneration with or without fibrosis and occasionally presence of Mallory bodies. Within 10-20 years, it may progress to cirrhosis. Persistent inflammation causes scar tissue around the liver and nearby blood vessels leading to fibrosis, but the liver is still able to function normally.

3.Cirrhosis: End stage liver disease, in which most of the hepatocytes are replaced by collagen, bridging septa, regenerating nodules.

4. Liver cancer: Inability of the liver to regenerate or repair (liver failure), hence replacement is needed in these cases.¹¹



CLINICAL PRESENTATION:

Most are asymptomatic at the time of diagnosis and many patients are obese, although it may be associated with:

- Fatigue, Malaise and Mild right upper quadrant discomfort.
- Indigestion, bloating of abdomen, sleep disturbances.
- Development of ascites, anasarca, variceal haemorrhage are symptoms of hepatic encephalopathy.¹
- In late course of NASH- Jaundice or yellowing of the skin and eyes may occur and it indicates advanced liver disease.²
- Hepatomegaly is the only sign in most of the patients.¹
- A small fraction of the patients develop symptoms indicative of more serious liver disease and may develop pruritis, anorexia, nausea.²
- Even in some cases spleen may get enlarged.
- Liver enzymes may be increased. The reading of SGOT and SGPT may be raised.
- Triglyceride levels may also be raised.¹

INVESTIGATIONS:

Blood tests:

- Complete blood picture
- Liver function tests
- Fasting blood sugar
- HbA1C
- Lipid profile
- Tests for chronic viral hepatitis (Hepatitis A, B, C etc.,).
- Celiac disease screening test

Imaging:

- **Abdominal Ultrasound:** It is most often used and provides a qualitative assessment of hepatic fat content, as the liver appears 'bright' due to increased echogenicity; sensitivity is limited when fewer than 33% of hepatocytes are steatotic.
- However, **CT, MRI or MR spectroscopy:** Offers a great sensitivity for detecting lesser degrees of steatosis, but these are resource-intensive and not widely used. No routine imaging modality can distinguish simple steatosis from steatohepatitis or accurately quantify hepatic fibrosis short of cirrhosis.
- **Transient elastography:** An enhanced form of ultrasound that measures the stiffness of liver. Liver stiffness indicates fibrosis or scarring.
- **Magnetic resonance elastography:** Works by combining MRI imaging with sound waves to create a visual map (elastogram) showing the stiffness of liver.
- **Liver biopsy:** Liver biopsy remains the 'gold standard' investigation for diagnosis and assessment of degree of inflammation and extent of liver fibrosis.⁷

DIAGNOSIS:

Most individuals are asymptomatic and are usually discovered incidentally because of abnormal liver function tests or hepatomegaly noted in unrelated medical conditions. Other's get diagnosed based on the medical history supported by blood tests, medical imaging, liver biopsy.¹⁰

A thorough clinical history taking, especially with regard to the amount of alcohol consumption, is essential for determining the role of alcohol in the aetiology of abnormal liver test results. History obtained from family members may reveal past alcohol related problems.

No specific test is available to rule out drug related toxicity, but a good review of all concurrent and recent medications, including over the counter medications and alternative treatments is valuable in evaluating the possible causes of non-alcoholic fatty liver disease.

GENERAL MANAGEMENT:

Current treatment comprises lifestyle interventions to promote weight loss and improve insulin sensitivity through dietary changes and physical exercises.¹

Increasing intake of certain healthy fats in the diet can help the body to utilize the available insulin in a better manner. So, increasing intake of Omega 3 fatty acids and monosaturated fats can help in these conditions. These are found in fish, nuts, flaxseeds, olives and green leafy vegetables. At the same time, one should avoid or reduce intake of saturated fatty foods which gets easily deposited in the liver. These saturated fats are found in red meat, poultry, fried foods and sugary or aerated drinks.¹⁰

REPERTORIAL APPROACH:

BOERICKE REPERTORY³:

1. ABDOMEN – Liver, Fatty degeneration: Aur., Chel., Kali-bi., Phlor., Phos., Pic-ac., Vanad.
2. ABDOMEN – Liver, CONGESTION (hyperemia, fullness, torpidity): Aesc., Aloe, Berb, Bry, Card-m., Cham., Carb-v, Chel, Chin., Hep, Hydr, Iris, Dios., Kali-bi, Kali-c., Kali-m., Lach., Lyc., Merc., Mag.m, merc-d, Nat-s, Nux-v., Phos., Podo., Ptel., Sep.
3. ABDOMEN – Liver, Enlargement (hypertrophy): Aesc., Agar., Ars., Calc-ar., Card-m., Chel Chin, Chinin-ar., Chion, Coloc., Con., Dig., Ferr-ar., Ferr-i., Glyc., Graph., Iod., Kali-c., Mag-m., Mang-act., Merc., Merc-d, Nat-s., Nur-v, Podo., Sec., Sel., Stel., Tarax, Vip., Zinc.
4. ABDOMEN – Liver, Induration: Abies-c., Ars., Aur., Chin., Con., Fl-ac., Graph., Lyc., Mag- m., Merc., Nux-v., Sil., Tarax., Zinc.
5. ABDOMEN – Liver, Inflammation (perihepatitis, hepatitis): Acon, Act-sp., Ars, Aur, Bry, Cham., Chel, Corn., Hep., Iod., Kali-i., Lach., Merc., Merc-d., Nat-s., Phos., Psor., Sil, Stel., Sulph.
6. ABDOMEN - JAUNDICE (icterus): Acon., Aur-m-n, Bry, Berb, Card-m., Cean, Cham, Chel, Chin, Chion, Dig., Hydr, Lept., Lyc., Merc, Merc c., Merc-d, Myric., Nat-p., Nux-v, Phos., Tarax, Vip.

KENT REPERTORY ⁵:

1. ABDOMEN - FATTY degeneration of liver: Chel., lyc., lyss., merc., phos.
2. ABDOMEN - ENLARGED - Liver: ars., aur-m., Bry., Calc., card-m., chel., **Chin.**, chin-a., chin, con, dig, ferr., ferr-i., ferr-p., iod., kali-c, kali-s, lach, lact., laur., **Lyc.**, **Mag-m.**, merc., phos, podo., ptel., nat-m., **Nat-s.**, nit-a, **nux-v.**, Sulph.
3. ABDOMEN - FULLNESS - Hypochondria - right: Aesc, aloe, chel, eup-per., kali-c., nat-m, podo, sang, thuj.
4. ABDOMEN - INFLAMMATION- LIVER - **Acon**, Apis., **Ars.**, **Bell**, Bry., calc, camph, cham., card-m., **Chel**, chin, hep, hippoz., kali- c., Lach., **Lyc.**, merc, nat-a, nat-c., Nat-m, nit-s., **Nux-v.**, phos., phyt, podo, psor., puls.
5. ABDOMEN - CIRRHOSIS, liver: Cupr., hep., hydr., mur-ac. Phos., plb., sulph.
6. ABDOMEN – HARD, Hypochondria, Liver: **Ars.**, aur-m., calc., carb-s., card-m., chel., **Chin.**, chin-a., con., **Dig.**, fl.ac., **Graph.**, hydr., **Iod.**, kali-i., lact., lyc, mag-c., **Mag-m.**, merc., nit-ac., **Phos.**, podo., **Rat.**, sil., sulph.

BBCR⁴

1. HYPOCHONDRIA- Fatty,L: Phos., Vanad.
2. ABDOMEN - ASCITES: Acon., **Amb.**, arg-n., **ARS**, **Bry.**, **Canth.**, **CHIN.**, **COLCH.**, dul., euphor., fer., **HELL**, iod., **Kali-c.**, Led., lyc., merc., mux- plb., pul., sep., apo., **Sulph.**

Homoeopathic Approach:

Most commonly used homeopathic medicines for liver diseases are as follows:

Chelidonium:

- The main seat of action of this remedy is on Hepatobiliary system.
- There is constant pain under the lower and inner angle of right scapula.
- Sharp and lancinating type of pains.
- There is sluggish liver with fermentation and accumulation of gas in the abdomen.
- The patient wants very hot food and drinks.
- Nausea and vomiting with bitter taste in the mouth.
- Stools are clay colored and yellow.

Lycopodium:

- Lycopodium acts mainly on the liver, where the function of the liver is seriously disturbed.
- Sensitive congested liver, Chronic hepatitis; atrophic; nutmeg liver; Cirrhosis.
- The pains are dull and aching
- Fullness in the stomach after eating a small quantity, sour taste.
- Aggravation from 4-8 P.M. is very characteristic of lycopodium.

Carduus marianus:

- The action of this drug is centered in the liver, and portal system, causing soreness, pain, jaundice.
- Dropsical conditions depending on liver disease.
- Pain in region of liver. Hyperaemia of liver. Fullness and soreness, with moist skin.
- Jaundice with dull headache, bitter taste, white tongue with red edges, nausea and vomiting of a greenish fluid.
- The stools are bilious and the urine golden yellow; there is sensitiveness in the epigastrium and right hypochondrium.
- A dark brownish patch over the lower part of the sternum as a useful hint for Carduus, indicates that both the liver and heart are at fault.
- The presence of liver spot seems to be a special indication for the remedy.

Nuxvomica :

- In liver affections occurring in those who have indulged to excess in alcoholic liquors, highly seasoned food, quinine, or in those who have abused themselves with purgatives, Nux vomica is the first remedy to be thought of.
- The liver is sore, enlarged; sticking pain, sensitive to the touch and pressure of clothing is uncomfortable.
- The first remedy in cirrhosis of the liver. Colic from uncovering.
- Shortness of breath caused by upward pressure of gas with ineffectual urge for stool and urine.

Sulphur:

- Sulphur is suitable to chronic affections of the liver; it increases the flow of bile and there is much pain and soreness in the liver.
- Liver complaints from abuse of mercury will often call for Sulphur.
- Sulphur often completes the cure commenced by Nux vomica.
- If the stools are colourless and if much jaundice or ascites be present Sulphur is contra-indicated.

Phosphorus:

- Fatty degeneration of the liver; with malignant jaundice with sharp cutting pain in the liver accompanied by nausea and vomiting.
- The stools are grayish white.
- Cirrhosis and atrophy may also call for Phosphorus.

Calcarea carbonicum:

- Calcarea Carb is very effective for obese Fatty Liver sufferers.
- The individual is chubby and flabby, with extra fat in the liver and entire abdomen.
- Liver region painful, agg. by stooping.
- It is effective in removing extra fat from the liver.
- In people who have been constipated for a long time, digestion is particularly slow.
- The stomach is usually bloated. Longing for eggs or undigestible things like chalk, pencil etc.,
- Cold sensitivity and profuse sweating on the head.

Vanadium:

- It is indicated in degenerative conditions of liver.
- Fatty degeneration of heart and liver.
- Deeply pigmented patches on forehead in liver affection. Profound weakness.

Bryonia:

- It is also useful in liver related complaints.
- Sharp stitching pain under the right shoulder blade.
- Bitter taste in the mouth and yellow tongue.
- Stools are hard, dry and brown.
- Aggravation from slightest motion is a very prominent symptom in bryonia. ^{3,6}

Conclusion:

Homeopathy is a holistic system of medicine where the selection of remedy is based upon the theory of individualization and symptom similarity. This system helps the homeopathic physician to regain state of complete health by removing all the signs and symptoms from which the patient is suffering. The aim of homeopathy is to treat fatty liver symptoms by addressing its underlying cause and individual susceptibility. As far as homeopathic system of medicine is concerned, several remedies are available to treat fatty liver symptoms

that can be selected on the basis of causation, sensation, modalities of the complaints and by individualizing each patient.

REFERENCES:

1. Davidson's principles and practice of medicine, 23rd edition, year of Publication - 2018
2. DR. Yashpal.Munjal, API Textbook of medicine, 10th Edition, Vol.:2, Jaypee Brothers Medical Publishers (P) Ltd., New Delhi, 2015, 10th Edition, Vol.:2
3. William Boericke, pocket manual of Homeopathic materia medica and repertory, 9th Edition. New Delhi; Mayur jain
4. C.M BOGER, M.D., Boger boenninghausen 's characteristics & repertory, 52nd impression, 2021, B Jain publishers(P)Ltd.
5. Kent JT. Repertory of the Homeopathic Materia Medica, 6th Edition: New Delhi; B. Jain Publishers (P) Ltd.
6. H.C Allen, M.D., Allen's keynotes, 10th edition, B. Jain publishers(P)Ltd. 2005
7. <https://www.ncbi.nlm.nih.gov/books/NBK541033/>
8. <https://www.homoeopathicjournal.com/articles/175/4-2-39-766.pdf>
9. <https://www.ijsr.net/getabstract.php?paperid=ART20171069>
10. <http://www.tjhms.com/uploadfiles/8.%20Homoeopathic%20Management%20of%20Fatty%20Liver%20Disease%20-%20A%20Review.20200424121230.pdf>
11. https://www.researchgate.net/figure/Schematic-of-progression-non-alcoholic-fatty-liver-disease-NAFLD-depicts-histological_fig1_311750359

