Therapy of nonalcoholic fatty liver disease: current status

Nonalcoholic fatty liver disease (NAFLD), the hepatic manifestation of the metabolic syndrome, has become a common entity in clinical practice. In most of the patients it presents as simple steatosis with nonprogressive clinical course. However, some patients have progressive form of NAFLD, nonalcoholic steatohepatitis (NASH), and are at increased risk of developing cirrhosis and hepatocellular carcinoma. NAFLD treatment includes lifestyle modifications and pharmacotherapy aiming at increasing insulin sensitivity, and attenuating inflammation and hepatic fibrosis. Weight reduction has consistently been shown to reduce levels of liver enzymes and insulin resistance. Although dietary intervention and exercise remain the first-line therapy, due to low patients compliance to these measures pharmacotherapy or surgical approaches are often required. Metformin and thiazolidinediones may improve insulin sensitivity, serum aminotransferase level and liver histology. However, little evidence exists regarding their sustained effects after drug discontinuation which, together with their side effects, limits their widespread use in clinical practice. Statins appear to be safe agents for the treatment of hyperlipidemia, although trials documenting their efficacy in NAFLD are scarce. Based on the recent clinical trials, weight loss medication orlistat, ursodeoxycholic acid and antioxidant agents could potentially be used as adjunctive therapy. Considering still largely controversial clinical data regarding pharmacological agents, their high cost and known side-effects, lifestyle modifications at present remain the only essential considerations in the NAFLD treatment.

1. What is NAFLD primarily associated with?
   a) Alcohol consumption
   b) The metabolic syndrome
   c) Viral infections
2. What is the non-progressive form of NAFLD known as?
   a) Nonalcoholic steatohepatitis
   b) Cirrhosis
   c) Simple steatosis
3. Which complication is associated with the progressive form of NAFLD?
   a) Hepatocellular carcinoma
   b) Pancreatic cancer
   c) Kidney failure
4. What is the first-line therapy for NAFLD?
   a) Surgical intervention
   b) Lifestyle modifications
   c) Pharmacotherapy
5. Why is pharmacotherapy often required in NAFLD treatment?
   a) Due to lack of effective medications
   b) Due to low patient compliance with lifestyle changes
   c) Because it offers faster results than lifestyle changes
6. What is a limitation of using metformin and thiazolidinediones in NAFLD treatment?
   a) They are too expensive for most patients
   b) Evidence of sustained effects after discontinuation is limited
   c) They cause severe liver damage
7. What do statins primarily treat in NAFLD patients?
   a) Insulin resistance
   b) Hyperlipidemia
   c) Hepatic fibrosis
8. Which medication is mentioned as a potential adjunctive therapy for NAFLD?
   a) Aspirin
   b) Orlistat
   c) Ibuprofen
9. Why are pharmacological treatments not widely used in NAFLD management?
   a) They are ineffective
   b) Clinical data is controversial, and they have high costs and side effects
   c) Patients prefer lifestyle modifications
10. According to the article, what remains the essential consideration in NAFLD treatment?
    a) Surgery
    b) Pharmacotherapy
    c) Lifestyle modifications

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