

9 POINTS FOR NAFLD AND NASH

1 **NAFLD vs. NASH**

NAFLD: broad term that could be used for liver acanthosis. It's a nonspecific term for liver fat.

NASH: liver fibrosis/ metabolic liver disease which is clinically significant and is diagnosed by liver biopsy. It is typically underdiagnosed.

2 **Patients at most risk for NAFLD and NASH**

Anyone who is overweight is at risk for NAFLD and NASH however persons with metabolic syndrome are at greatest risk. NAFLD and NASH is mostly seen in people with type 2 diabetes. Other risk factors include smoking, aging, sedentary lifestyle, eating a high fructose and high saturated fat diet.

3 **1/6 persons with diabetes in outpatient clinics have liver fibrosis**

They are often missed as NAFLD and NASH isn't screened in outpatient clinics.

4 **Screening for NAFLD and NASH**

Utilize non-invasive liver scores (Fib 4 scores) to examine liver risk when seeing persons with type 2 diabetes in outpatient clinics. Refer patient to Hepatology if the score meets the threshold.

5 **Treatments for NAFLD and NASH**

- Treatment for NAFLD and NASH is weight loss! Diet is an important way to target weight loss. The best diets include healthier fats, more fruits and vegetables (Mediterranean diet & DASH diet). High saturated fats and fructose (found in many processed foods) are the worst for liver disease.
- Exercise is the gold standard for treatment of insulin resistance. 150 min. of moderate intensity is good for your liver. What exercise is best? Whatever the patient likes and enjoys. People who exercise tend to eat better!

6 **Supplements**

Caffeine is good for the liver. Vitamin D has not been shown to have an impact on liver health however studies show Vitamin E (800 IUs daily) to be useful in persons without diabetes. For persons with diabetes, medication is included:

- TZDs medications, SGLT2 inhibitors, and GLP agonists have been shown to be antifibrotic in persons with diabetes.

7 **Predisposition to NAFLD and NASH**

NAFLD and NASH tend to affect the same ethnic groups that are more predisposed to diabetes:

- Women, especially post-menopausal women
- Hispanic population
- South Asian population

8 **Bariatric surgery**

Bariatric surgery is powerful in terms of weight loss, specifically visceral fat loss, but has to be done very safely. Clinicians must assess patients individually based on their co-morbidities & obesity to determine if medication or surgery is the better option.

9 **Liver disease is a comorbidity for diabetes**

The earlier a clinician catches it, the better the outcomes for the patient. Clinicians need to implement a systematic approach for examining patients for NAFLD and NASH routinely in their practice.

