



Is it wise to advocate Bariatric Surgery for patients with end-stage liver disease and severe obesity?

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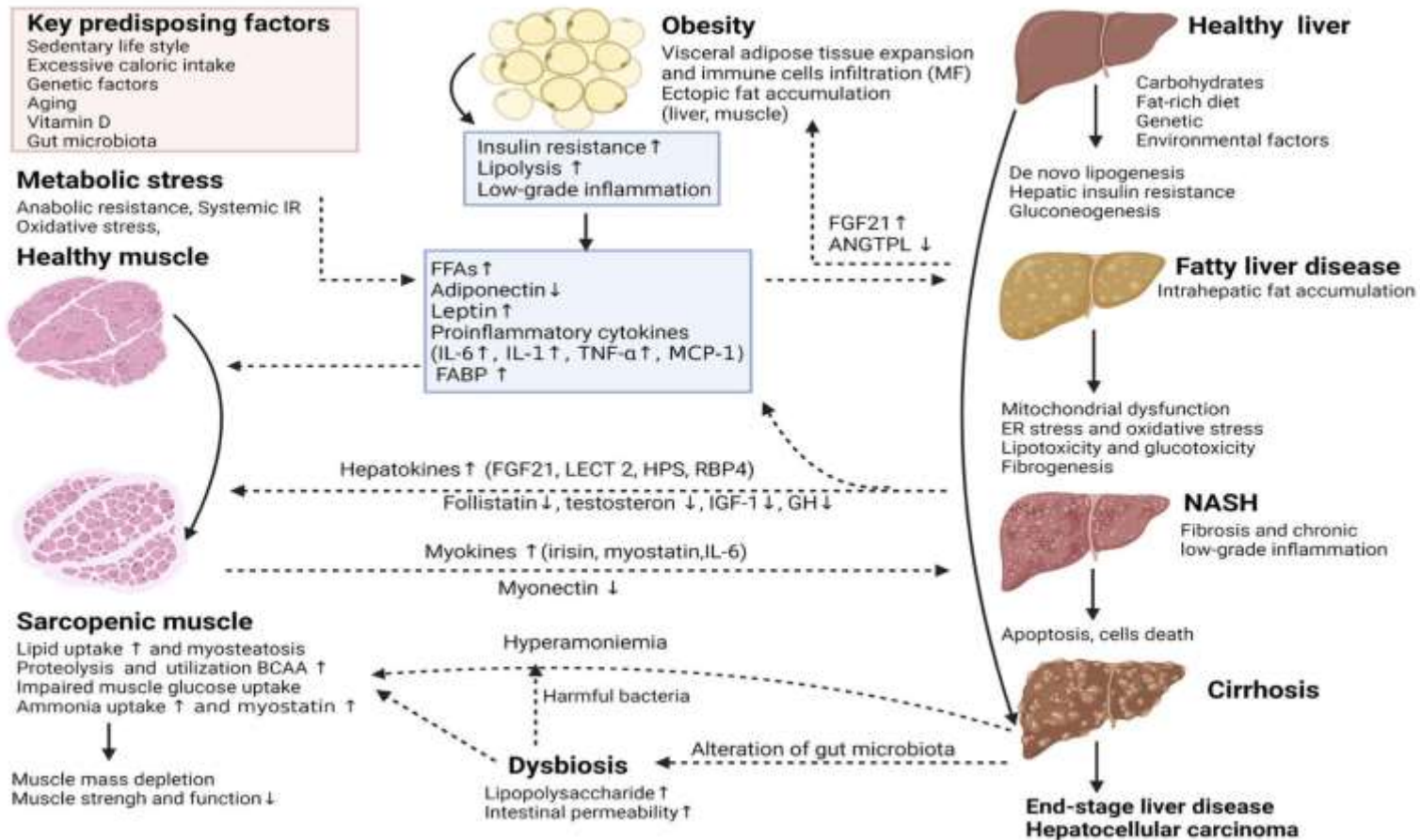
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OBESITY & LIVER DISEASE

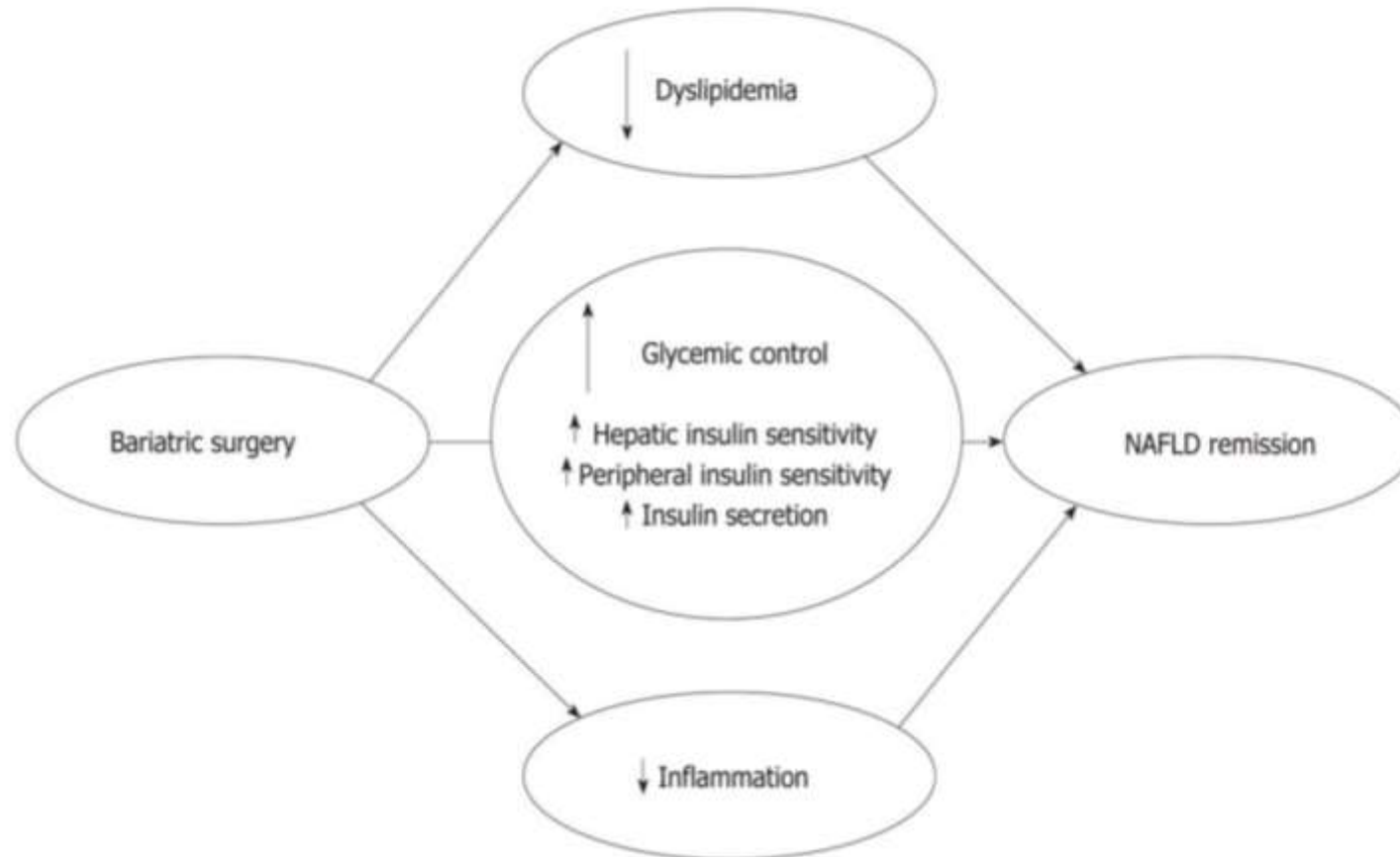
- **Obesity** is strongly associated with **NAFLD** and the obesity epidemic has led to NAFLD becoming the most common cause of chronic liver disease and indication for liver transplant.
- Some patients with NAFLD may progress to develop NASH and eventually liver **cirrhosis**
- Patients with ESLD have **↑ perioperative risk with abdominal and nonabdominal surgery**, **↑** risk of bleeding from the GI tract, and **↑** risk of mortality from the liver and renal failure
- **BS** may be a **bridge to LT** in patients with obesity who may have otherwise been excluded

OBESITY & LIVER DISEASE



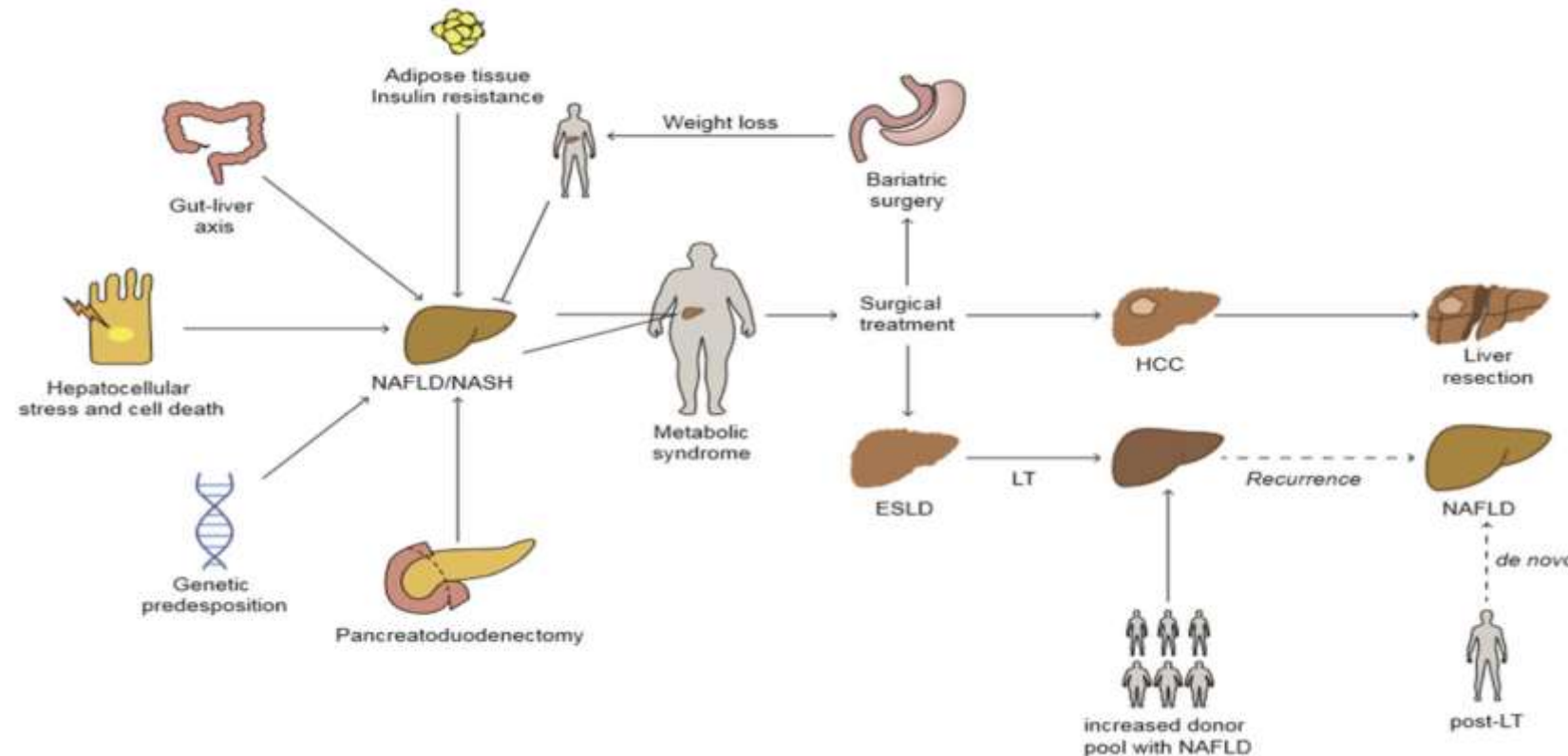
Zambon Azevedo, V., et al., Impact of Sarcopenia on the Severity of the Liver Damage in Patients With Non-alcoholic Fatty Liver Disease. Front Nutr, 2021. 8: p. 774030.

BARIATRIC SURGERY & LIVER DISEASE



Laursen, T.L., et al., Bariatric surgery in patients with non-alcoholic fatty liver disease - from pathophysiology to clinical effects. World J Hepatol, 2019. 11(2): p. 138-149.

BARIATRIC SURGERY: bridge to Liver Transplant



Kaufmann, B., et al., Mechanisms of nonalcoholic fatty liver disease and implications for surgery. Langenbecks Arch Surg, 2021. 406(1): p. 1-17.


BS & ESLD : our single-centre experience

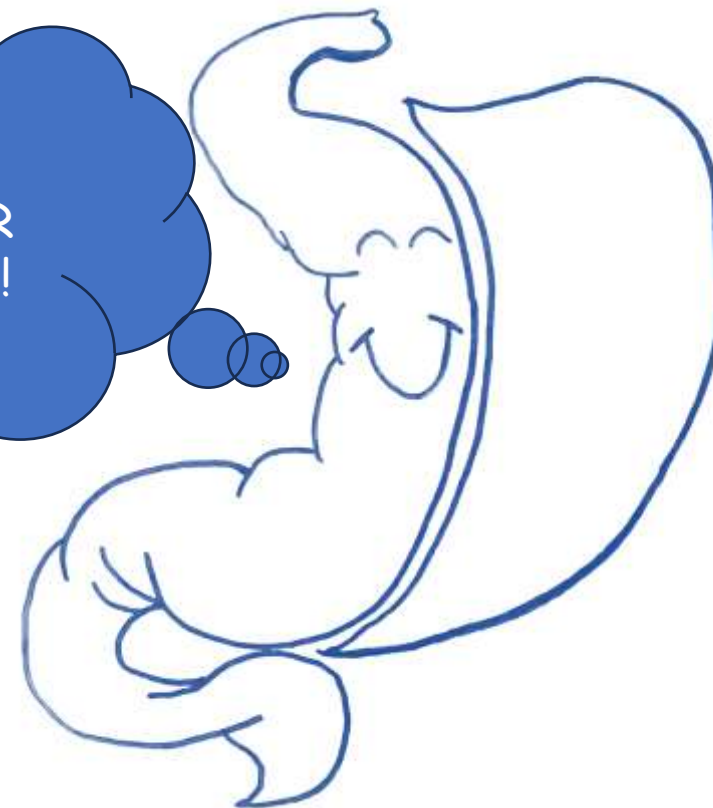
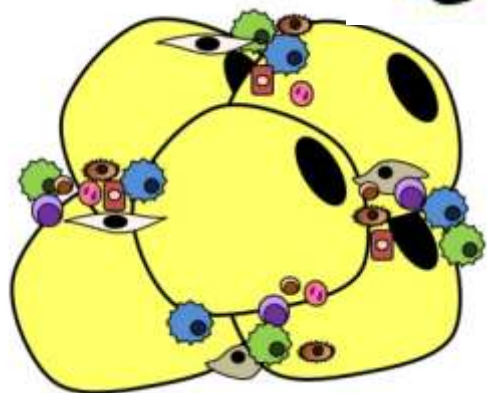
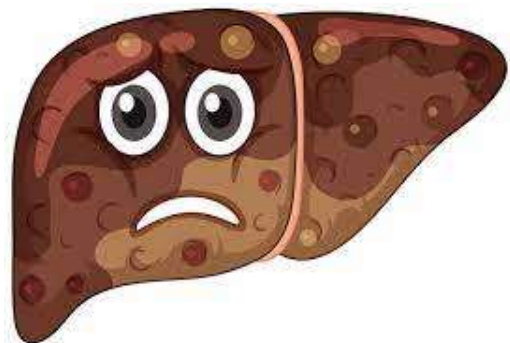
PATIENTS BASELINE CHARACTERISTICS and POST-OPERATIVE OUTCOMES	
SEX	1 F; 2 M
AGE	60,2±8.5 ys
PREOPERATIVE BMI	48.1 kg/m ² (range 40-61,7)
MELD SCORE	7,14 and 14 respectively
COMPLICATIONS	2(early staple leak on POD 2, late staple leak on POD 30)
DEATHS	2(POD 60 and POD 90 respectively)

BS & ESLD : our single-centre experience

- LSG was performed in all 3 cases
- In 2 cases LSG was associated with S6 liver resection + Radical Total Nephrectomy and MV ablation S2-S3, respectively
- The post-operative course was uneventful in only one patient who is still on fu 36 months after surgery with a EWL of 52.5%
- LSG was preferred for the following reasons: no need for intestinal anastomosis and allows the endoscopic access to biliary system , no alteration in the intestinal absorption of drugs (immunosuppressants after LT) and nutrients without the risk of malnutrition; the metabolic benefit beyond the weight loss – higher GLP1 – serum levels, lower ghrelin, increased postprandial release of cholecystokinin and peptide YY, accelerated gastric emptying.

TAKE HOME MESSAGES

- BS may represent an important treatment strategy for patients with obesity and compensated cirrhosis not only to produce durable weight loss but also to build a bridge to LT.
-  rate of mortality may be due to the progression of underlying ESLD and other co-morbidities so careful selection, excellent preoperative optimization , counseling, meticulous surgery, and good postoperative management are paramount.
- Implementation of clinical programs on BS for individuals with obesity and ESLD should be done by multidisciplinary teams and in hospitals with BS and transplantation programs with both center and surgeon specific high procedure volume.



THANK YOU FOR YOUR ATTENTION