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THE EARLY IMPACT OF BARIATRIC SURGERY ON METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE (MASLD) AS ASSESSED BY FIBROSCAN.

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Disclosure Slide

X	No, nothing to disclose
	Yes, please specify:

Introduction

- MASLD is the most common cause of chronic liver disease worldwide [1]. Its global prevalence is 30%, rising to 80–90% among adults with obesity [2].
- Fibroscan is an accurate, non-invasive tool used to detect the presence and progression of MASLD using Controlled Attenuation Parameter (CAP) and Liver Stiffness Measurement (LSM). [3, 4].
- CAP > 240dB/m = hepatic steatosis [5].
- LSM > 7kPa = hepatic fibrosis, LSM >12kPa = advanced fibrosis [5].

5. European Association for the Study of the Liver (2021). EASL Clinical Practice Guidelines on non-invasive tests for evaluation of liver disease severity and prognosis - 2021 update. *Journal of hepatology*, *75*(3), 659–689.

Methods

- Prospective cohort study.
- Variables included from the Bariatric Unit Database: Age, Sex, BMI, Diabetes, Sleep Apnoea, Hypertension, LSM, CAP, TBWL%.

- Data were collected on all patients who underwent bariatric surgery between November 2022 to December 2024.

- 245 Patients underwent bariatric surgery
  - 165 (67%) of these had preop Fibroscans, of which 2 did not meet the criteria for MASLD
  - Of the 163 with MASLD preop, 92 had a post op Fibroscan

Fibroscan results and BMI

Mean time to post op Fibroscan = 7 ±1 months

	Before Bariatric Surgery (Mean ±SD)	After Bariatric Surgery (Mean ±SD)	Mean Reduction (%)	Paired t-test p-value
CAP (dB/m)	356 ±40	264 ±54	26%	<0.001
LSM (kPa)	8.15 ±5.15	5.5 ±3.2	32%	<0.001
BMI (kg/m²)	49.2 ±7.3	36.6 ±6.1	26%	<.0001
	Total (%)	Total (%)		p-value
CAP>240	92 (100%)	52 (57%)		<0.001
LSM >7	35 (43%)	7 (9%)		<0.001
LSM >12	14 (17%)	4 (5%)		<0.001

43% had normalised CAP 6 months post operatively.
80% of those with hepatic fibrosis had normalised LSM 6 months postoperatively.

47 (51%) showed an improvement in CAP >25% 6 months postoperatively.
30 (33%) showed an improvement in LSM >25% 6 months postoperatively.

Conclusion

- Our findings also demonstrated significant and rapid regression of advanced hepatic fibrosis and steatosis following bariatric surgery as early as 6 months post operatively.

- Fibroscan is an invaluable tool that enables non invasive assessment of hepatic steatosis and fibrosis, reducing the need for liver biopsies.

- Liver biopsy should be reserved for those patients with persistently high CAP and LSM scores after at least six months postoperatively.

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