Is Hepatic Steatosis Individually a Risk Factor for Colorectal Adenoma

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Introduction

- Studies have shown obesity, insulin resistance and metabolic syndrome as risk factors for colorectal cancers (CRC).
- NAFLD and NASH are the common hepatic manifestations of metabolic syndrome.
- Not many studies have been done to identify the association between NAFLD and CRC.

Aim

- To study the association between

VCTE Diagnosed Moderate to Severe Hepatic Steatosis ⟷ **Colorectal adenomas and Adenoma Detection Rate**

Methods

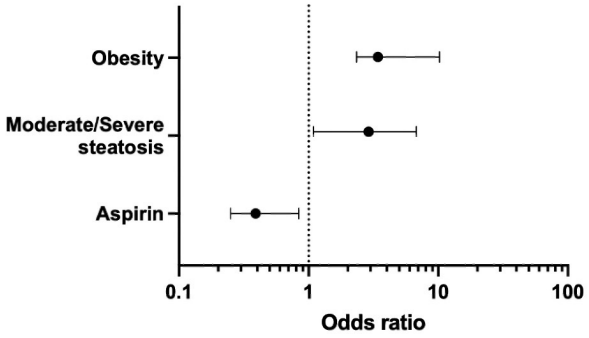
- Steatosis graded using CAP (Controlled Attenuation Parameter) grade on VCTE (Vibration-Controlled Transient Elastography).
- Steatosis categorized as Mild: S0-S1 & Moderate/Severe: S2-S3.
- Colonoscopy data stratified as hyperplastic polyp, adenoma, carcinoma, inflammatory polyp or normal mucosa.

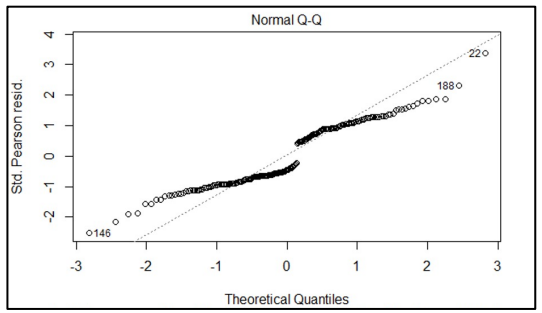
Statistical Analysis:

- Continuous variables were assessed using Mann-Whitney U test
- Categorical variables were assessed using Chi-Square.
- Multinomial Logistic Regression Analysis (MLRA) was used between colorectal adenoma detection and significant covariates.

Results

Patient Characteristics	p-value
Age (mean & median)	0.03
BMI > 25	0.001
Obesity (BMI >30)a	0.03
Smoking	0.004
Alcohol	0.01
Aspirin use	0.011
Adenoma detection	0.02





	Odds Ratio	Confidence Interval	p-value
Aspirin	0.39	0.25-0.85	0.01
Obesity (BMI > 30)	3.5	2.39-10.45	0.03
Moderate-Severe Steatosis	2.9	1.07-6.78	0.02

Conclusion

- Our study demonstrates moderate/severe hepatic steatosis is associated with increased risk of colorectal adenoma detection when matched with other variables.

Prospective studies are needed:

- To further understand this positive association
- To study the benefit of earlier and more frequent CRC screening in patients with hepatic steatosis.

- **Non-invasive screening of NASH/NAFLD can be utilized to guide timing of CRC screening for early detection of lower GI malignancies.**

References

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