Risk of colorectal neoplasia according to fatty liver severity and presence of gall bladder polyps

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Background: Fatty liver is known risk factor for colorectal neoplasia (CRN). Gallbladder (GB) polyps share many common risk factors with CRN. But, studies evaluating CRN risk according to fatty liver severity and the presence of GB polyps are rare. We investigated CRN risk according to the fatty liver severity and the presence of GB polyps. **Methods:** A retrospective cross-sectional study was performed on 44,220 participants undergoing colonoscopy and abdominal ultrasonography (US) as part of a comprehensive health-screening program. **Results:** Fatty liver was diagnosed as mild in 27.7%, moderate in 5.1%, and severe in 0.4% and 13.4% were diagnosed with GB polyps. In adjusted models, overall CRN risk increased with worsening fatty liver severity. The presence of GB polyps did not correlate with CRN risk. **Conclusions:** CRN risk increased with worsening fatty liver severity but was not associated with the presence of GB polyps. So, our study will contribute to colonoscopy screening strategies in people undergoing abdominal US as health screen.

Table 1. Risk for overall colorectal neoplasia according to the fatty liver grade and presence of GB polyp

	n	Prevalent case	Crude OR (95% CI)	Multivariate OR (95% CI) Adjusted model
Fatty liver grade				
None of fatty liver	25,261	1,640 (6.5%)	1	1
Mild	11,044	1,031 (9.3%)	1.48 (1.37-1.61)	1.15 (1.05-1.26)
Moderate	2,118	196 (9.3%)	1.47 (1.26-1.72)	1.17 (0.98-1.39)
Severe	163	21 (12.9%)	2.13 (1.34-3.38)	1.49 (0.92-2.40)
P for trend			<0.001	0.002
The presence of GB polyp				
None of GB polyp	33,596	2,473 (7.4%)	1	1
GB polyp	4,990	415 (8.3%)	1.14 (1.02-1.27)	1.09 (0.97-1.21)
p value			0.017	0.141

Adjusted model: age and sex, smoking status, family history of CRC, BMI, aspirin use, DM and HTN.

저자 요청 취소