FALK FOUNDATION e.V.

ABDOMINAL IMAGING IN GASTROENTEROLOGY & HEPATOLOGY

July 7–8, 2022

Symposium 228
AMSTERDAM (THE NETHERLANDS)

1st POSTER AWARD

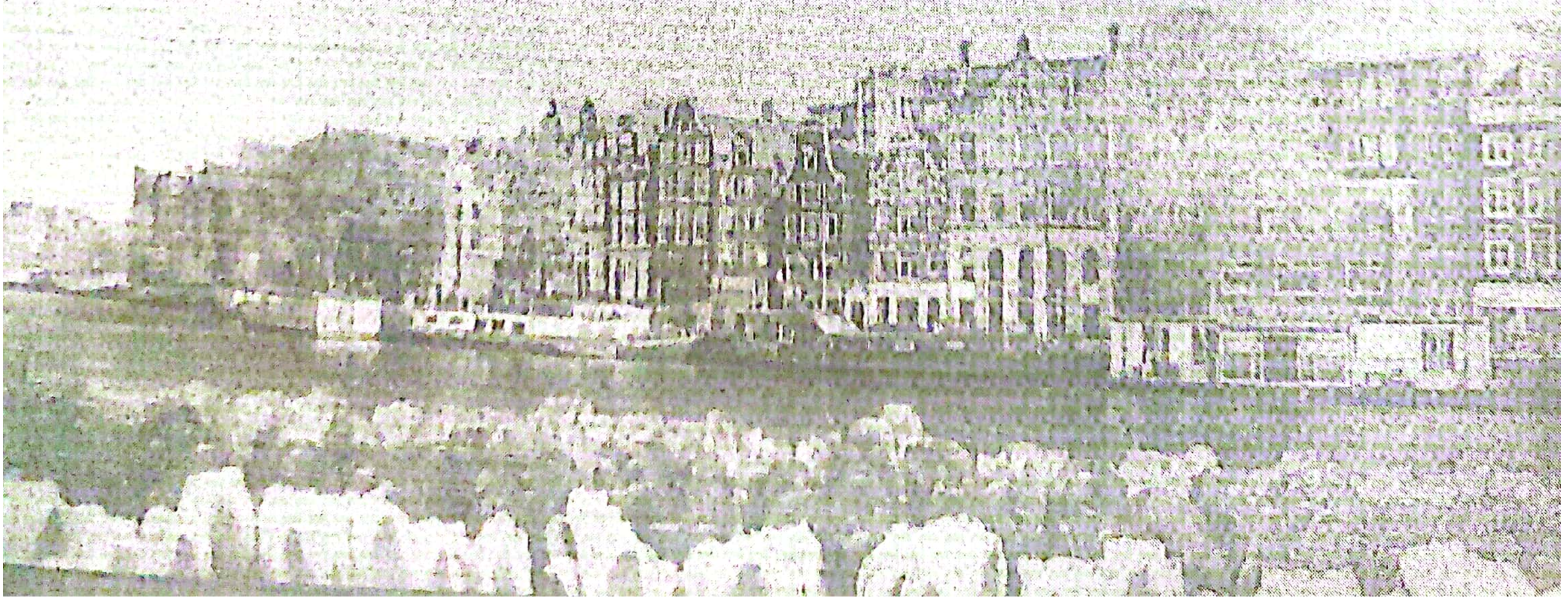
Awarded to

Remus Stafie

Iasi

Poster Jury and Scientific Organization

Robert de Knegt, Rotterdam
Marco Bruno, Rotterdam
Arjun Koch, Rotterdam
Michael P Manns, Hannover
[illegible]



Scanned with CamScanner

Assessing the Risk for Non-alcoholic Fatty Liver Disease Development among Patients with Ulcerative Colitis

Remus Stafie[1,2], Carol Stanciu[1,2], Adrian Rotaru[1,2], Sebastian Zenovia[1,2], Ermina Stratina[1,2], Robert Nastasa[1,2], Ana Maria Singeap[1,2], Camelia Cojocariu[1,2], Catalin Sfarti[1,2], Irina Girleanu[1,2], Stefan Chiriac[1,2], Tudor Cuciureanu[1,2], Laura Huiban[1,2], Cristina Muzica[1,2], Anca Trifan[1,2]

1 University of Medicine and Pharmacy "Grigore T. Popa", Iasi, Romania

2 "St. Spiridon" Emergency Hospital, Institute of Gastroenterology and Hepatology, Iasi, Romania

Keywords: non-alcoholic fatty liver disease, ulcerative colitis, controlled attenuation parameter

Background and aims: Inflammatory bowel disease (IBD) is a pathology of the gastrointestinal tract in which Ulcerative Colitis (UC) and Crohn's Disease are the two major forms. A relatively common extraintestinal manifestation of IBD is non-alcoholic fatty liver disease (NAFLD), approximately 5% of these patients developing chronic liver disease overtime. The aim of this study was to evaluate UC as a risk factor in the development of NAFLD.

Methods: In total 56 patients with UC and 63 healthy controls were enrolled between June 2021 to November 2021. Both groups of patients were non-obese, with a body mass index < 30 kg/m^2 and had no known history of type 2 diabetes or metabolic syndrome (MetS). Anthropometric evaluation, biochemical parameters and personal medical history were collected. Each patient was evaluated using Vibration-Controlled Transient Elastography with Controlled Attenuation Parameter (CAP). The cut-off value of CAP score for liver steatosis was 248 dB/m.

Results: Of 56 UC patients, 31(55.4%) were diagnosed with NAFLD having a mean CAP score of 258±29 dB/m *vs.* 223±38 dB/m (p=0.003) in the control group. Regarding liver stiffness, there were no significant statistical differences between the two groups (5.1±1.1 kPa vs 4.8±1.3 kPa, p=0.263). Multivariate analysis showed that patients with UC had a 3-fold higher risk for the presence of NAFLD [odds ratio: (OR)-3.2, 95%, confidence interval (CI) 1.72–9.3, $p < 0.001$]. In the univariate analysis severe steatosis was positively associated with extensive intestinal involvement of the disease (r = 0.14, p = 0.024), older age (r = 0.13, p = 0.040) and male gender (r = 0.273, p = 0.019).

Conclusion: NAFLD is a common finding among UC patients. When comparing to a group of healthy subjects, UC patients have a higher risk for developing NAFLD, even in the absence of classic risk factors like obesity and MetS.