

Incidentally Diagnosed IPMNs in Liver Cirrhosis: Prevalence and Clinical Relevance

Giulia Zerboni¹, Roberto Valente¹, Matteo Piciucchi¹, Marianna Signoretti¹, Elsa Iannicelli²,
Mario Antonelli¹, Massimo Marignani¹, Gabriele Capurso¹, Gianfranco Delle Fave¹

Digestive and Liver Disease Unit and Radiology, "S. Andrea" Hospital, "Sapienza" University.
Rome, Italy

Context Intraductal papillary mucinous neoplasms of the pancreas (IPMN) have become diagnosed with increased frequency mainly due to the improvement and wide spread use of imaging studies, such as computed tomography (CT) and magnetic resonance (MR). The incidental diagnosis of IPMN in patients with other chronic disorders may affect their management. Incidental pancreatic cysts (PCs) are frequent in liver-transplanted patients, but there are no data on their prevalence in patients with liver cirrhosis (LC). **Objective** The primary aim of this study is to evaluate the prevalence of newly diagnosed PCs and IPMNs in a series of LC patients undergoing CT and/or MR during their follow-up. The secondary aim is to investigate whether LC patients with IPMNs have different features from LC without, and if the diagnosis of IPMN affects their clinical management. **Methods** Retrospective analysis of a prospective cohort of LC patients seen at our Unit between January 2002 and November 2011, who underwent at least one CT or MR. Clinical and demographic features of all patients, and their follow-up were recorded in a database. LC patients with (group A) or without IPMN (group B) were compared by means of Fisher test or t-test. **Results** Fourteen of 223 LC patients (6.2%) had an incidental diagnosis of a PC. Of these, 9 patients (4%)

had a confirmed diagnosis of IPMN; all of them were branch duct (BD) lesions, with a diameter <3 cm. Patients with IPMN (group A, n=9) were slightly older at diagnosis of LC (mean 67.1 years) as compared to those without any PC (group B, n=209; mean age 62.9 years, P=0.08). There were no differences in terms of sex (male 67% in group A vs. 70% in group B; P=1), viral etiology (56% in group A vs. 40% in group B, P=0.5), alcoholic etiology (22% in group A vs. 39% in group B, P=0.5), HCV positivity (56% in group A vs. 30.5%, P=0.1), and rate of HCC (22% in group A vs. 38% in group B; P=0.5). A similar distribution for clinical liver function was observed (Child A 33%, B 45%, C 22% in group A; Child A 46%, B 40%, C 14% in group B; P NS). IPMNs did not significantly affect the clinical management of LC patients, and none of the patients died due to IPMN during a 17 months mean follow-up. **Conclusion** In this series of patient with LC, we observed an occasional 4% rate of BD-IPMN, apparently unrelated to the underlying hepatic disease, nor to clinical features. Diagnosed IPMN were small BD lesions, and their finding did not affect the management or the prognosis of LC patients. Future studies should compare the rate of PCs and IPMNs in LC and controls to confirm that the association is merely occasional.