

Are Diagnostic Errors in Cystic Tumors of the Pancreas Clinically Relevant?

**Marco Del Chiaro¹, Caroline Verbeke², Elena Rangelova¹,
Christoph Ansorge¹, John Blomberg¹, Nils Albiin³, Ralf Segersvärd¹**

Departments of ¹Surgery, ²Pathology, and ³Radiology, Karolinska Institute. Stockholm, Sweden

Context Diagnostic errors in the preoperative evaluation of cystic neoplasm of the pancreas (CNP) are not uncommon. Only limited data is available regarding the impact of these errors on clinical management. **Objective** This study aims to evaluate the clinical impact of these diagnostic errors. **Methods** A series of 141 patients undergoing surgery for CNP at Karolinska University Hospital was retrospectively analyzed. There were 60 males and 81 females; the mean age was 60.3 years. CT was performed in 138 patients (97.8%), MR in 85 (60.3%), and EUS in 31 (21.9%). **Results** Histology confirmed the pre-operative diagnosis in 60.9% of patients. The concordance rate between pre-operative diagnosis and histology was similar for asymptomatic and symptomatic lesions (60.5% vs. 61.4%; P NS). The rate of correct diagnosis

increased over time (2004-2006: 54.5%; 2007-2012: 61.7%; 2010-2012: 63.5%). Lymphoepithelial cysts (2/2) were misdiagnosed most frequently, followed by serous cystic neoplasia (24/33, 72.2%), solid pseudopapillary neoplasia (5/8, 62.5%), mucinous cystic neoplasia (7/25, 28%), and IPMN (17/56, 23.3%). Re-evaluating the surgical indication in view of the histological diagnosis, surgical resection was not required in 13 patients (9.2%). There was no mortality in this patient group, and morbidity amounted to 53.8%. **Conclusions** The results confirm that preoperative diagnostic errors are quite common in CNP, however, the percentage of patients who unnecessarily undergo surgery is low (9.2%). The error rate is similar for symptomatic and asymptomatic patients.