COMMENTARY

Current Treatment Strategy for Intraductal Papillary Mucinous Neoplasms (IPMNs)

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ABSTRACT

An intraductal papillary mucinous neoplasm (IPMN) is a benign pancreatic cyst that can turn malignant, or cancerous, in the ducts of your pancreas. Not all of these tumours develop into cancer. However, experts believe IPMNs are to blame for pancreatic cancer incidences. Surgery is used to treat malignant IPMNs. IPMNs are pancreatic cystic neoplasms that form within the pancreatic ducts and produce mucin. Because they have the potential to become malignant, it is critical to diagnose and treat them as soon as possible.

IPMNs in the pancreas' head or uncinate process are often removed *via* the Whipple surgery (pancreaticoduodenectomy). In rare cases if the intraductal papillary mucinous tumour encompasses the entire length of the pancreas, a total pancreatectomy (removal of the entire gland) may be indicated.

INTRODUCTION

Pancreatic non-inflammatory cystic lesions are becoming more common. Two different entities have been identified: Intraductal Papillary Mucinous Neoplasm (IPMN) and Mucinous Cystic Neoplasm (MCN). Ovarian-type stroma has been considered as a need for distinguishing MCN from IPMN. Other distinguishing characteristics of IPMN and MCN have been established, yet there are still some differences between the two disorders. Given the rising prevalence of these neoplasms globally, guidelines for the diagnosis and treatment of IPMN and MCN would be beneficial for clinicians managing patients with cystic neoplasms of the pancreas. The proposed guidelines represent the consensus [1].

IPMN is distinguished by increased mucus secretion. It is a benign or low-grade tumour characterised by a dilated main pancreatic duct, patulous ampullary orifice, and excessive mucus secretion. Aggressive cancer foci can form and become invasive. IPMN can only be cured through surgery, although the extent of pancreatic resection and intraoperative margins are still debatable. Total pancreatectomy risks must be balanced against the chance of getting cancer in the leftover pancreas. Risks must be balanced against the disease's natural course and the possibility of malignancy developing throughout the course of a person's life [2].

The true incidence of pancreatic cystic lesions is unknown. The malignant potential of certain of these lesions is still a major source of concern. As a result, it is critical to devise a technique for clearly distinguishing cysts with the potential for malignant transformation from those with no major risk. Intraductal papillary mucinous neoplasms and mucinous cystadenomas are malignant mucinous cystic neoplasms that have received attention in recent years. Nonetheless, despite several researches, their differential diagnosis among other cyst subtypes and therapeutic strategy remain to be a difficulty for clinicians. This study examines the current recommendations and management options for intraductal papillary mucinous neoplasms and mucinous cystadenomas, highlighting the limitations of current guidelines [3].

IPMN are gaining popularity and becoming more common. This review focuses on current knowledge of IPMN management, including morphological classification, subclassification based on cell lineage features, molecular abnormalities, radiological and imaging evaluation, progression to cancer, incidence and risk factors for malignancy, risk of distinct pancreatic adenocarcinoma and extrapancreatic malignancies, treatment strategy, and surgical resection types. Missing links in the IPMN

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puzzle are described in particular with regard to differential diagnosis, role of cyst fluid analysis, multifocal IPMN, histological evaluation of the surgical specimen, observation without resection, follow up of patients after resection, role of adjuvant therapy for invasive carcinoma, screening for other neoplasms in patients with IPMN on follow up, prognostic factors influencing long-term outcomes, and role of endoscopic therapy [4].

Based on histologic findings, IPMNs are divided into gastric, intestinal, pancreatobiliary, and oncocytic subtypes. According to the WHO classification scheme, immunohistochemical stains can be used to help subtype IPMNs with equivocal histology. There were 72 pancreatic IPMN resections. In our experience, a large proportion of IPMNs are either unclassifiable or comprise epithelium from more than one subtype. Furthermore, among those IPMNs that were initially unclassifiable by H&E morphology, the use of immunohistochemical stains to aid in subtyping only allows for final classification in a small number of instances. When these findings are combined with the wide differences in the reported prevalence of specific histologic subtypes, they show that precise IPMN subtyping is difficult to reproduce in up to 25% of patients, and immunohistochemistry offers little benefit in these circumstances [5].

CONCLUSION

Following up on these individuals, as well as those who do not have surgical resection, is critical, because people with IPMN appear to be at risk for other cancers. The authors share data from the 2013 ASCO Gastrointestinal Cancers Symposium on the incidence and clinicopathological aspects of IPMN in this paper.

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