SHORT COMMUNICATION

Clinical Diagnostic and Therapeutic Challenges in Mucinous Pancreatic Neoplasms

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ABSTRACT

Mucinous Cystic Pancreatic Neoplasms (MCPN) is uncommon pancreatic tumours that predominantly affect middle-aged women. This illness has a far higher survival rate than pancreatic ductal adenocarcinomas. Intraductal papillary mucinous neoplasms are frequently confused with the malignancies (IPMN). Mucinous Cystic Neoplasms (MCNs) are cysts that are normally benign but can develop into malignancy. MCNs are frequently detected in the pancreas' body or tail. Mucinous neoplasms of the appendix are a heterogeneous category of epithelial neoplasms that frequently cause cystic dilatation of the appendix due to the buildup of gelatinous material, morphologically known as mucoceles.

INTRODUCTION

Mucinous cystic neoplasms of the pancreas are rare pancreatic tumours that mostly affect middle-aged women and mostly affect the body and tail of the pancreas. They are surrounded by an ovarian-like stroma and lined with a mucinous epithelium that can demonstrate different degrees of dysplasia. In the absence of invasive cancer, surgery is the preferred treatment, and the prognosis is excellent [1].

Mucinous Cystic Neoplasms (MCNs) are the most prevalent pancreatic primary cystic neoplasms. The presence of ovarian type stroma in the pathological examination distinguishes these lesions, which commonly occur in the body and tail of the pancreas. Mucinous cystic neoplasms have a high risk of becoming cancerous; hence early detection and resection are critical. Mucinous cystic neoplasms are most commonly found in women. Only a few examples in male patients have previously been recorded. The patient was sent to our centre after an inadvertently discovered cystic lesion in the pancreas tail that was growing in size throughout serial assessment. An open distal pancreatectomy was performed on the patient. The histology revealed a mucinous cystic neoplasm with an ovarian-like stroma and oestrogen and progesterone receptor positivity. Mucinous cystic neoplasms can occur in men, according to this case report, and should be included in the differential diagnosis of cystic pancreatic tumours in this population [2].

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Pancreatic cystic neoplasms account for a minor percentage of pancreatic tumours. Mucinous cystic tumours, for example, are more common in women in their forties and fifties. Pancreatic cystic neoplasms can be benign, borderline, or malignant in nature. These tumours progress from a benign (mucinous cystadenoma) to a malignant state over time (cystadenocarcinoma). Cystic tumours, especially mucinous cystic tumours of the pancreas, are difficult to diagnose, and the final diagnosis is typically made only after the surgical surgery, which is the gold standard treatment for this condition. We discuss the case of who underwent distal splenopancreasectomy after being diagnosed with a mucinous cystic tumour of the body-tail of the pancreas [3].

Pseudocysts, congenital cysts, and cystic neoplasms such as mucinous cystic neoplasms, intraductal papillary mucinous neoplasms, and serous cystic neoplasms are all prevalent pancreatic cystic lesions. Mucinous cystic neoplasms are large septated cysts that lack a ductal link and are characterized by thick-walled ovarian-type stroma and mucin. They are more common in women and are frequently cancerous. As a result, surgical resection is advised. Intraductal papillary mucinous neoplasms involve the main pancreatic ducts or major side branches and have tall, columnar, mucin-containing epithelium [4].

As a result, surgical resection is required. Multiple cysts bordered with cubic flat epithelium containing glycogen-rich cells with transparent cytoplasm characterize serous cystic neoplasms. They mostly affect women in their 50s and are usually harmless. As a result, a cautious

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approach is advised. Because both mucinous cystic neoplasm and intraductal papillary mucinous neoplasms have a high malignant potential, distinguishing between the two pancreatic cystic lesions is critical. A variety of imaging modalities and tumour markers were tested. Despite this, solid criteria for distinguishing serous cystic neoplasms from mucinous cystic neoplasms and intraductal papillary mucinous neoplasms are still lacking. A number of management concerns for these neoplasms are still being debated, such as which imaging technology to employ, how to distinguish between malignant and benign lesions, and which therapy strategy is best for each pancreatic cystic neoplasm. More study could lead to a comprehensive guideline for mucinous cystic neoplasms, intraductal papillary mucinous neoplasms, and serous cystic neoplasms diagnosis and therapy [4].

Mucinous pancreatic neoplasms are difficult to diagnose and treat. These tumours are indolent, with symptoms and radiological appearance that frequently overlaps with other types of pancreatic cysts, pseudocysts, and malignancy. Some writers believe that all pancreatic mucin-producing tumours are variations of the same basic organism, and have categorized them according to their main location inside the pancreas. These conditions should be taken into account while evaluating chronic abdominal pain, especially if there is a cystic pancreatic lesion present or if it is accompanied with idiopathic chronic or acute recurrent pancreatitis. IMHN shares several clinicopathologic characteristics with classic mucinous cystic neoplasms, although they differ enough to be considered separate clinical entities [5].

CONCLUSION

Mucus produced by MDE, on the other hand, flows into the primary pancreatic duct, causing obstructive pancreatitis and, eventually, pancreatic duct dilation. Intraductal mucus is a crucial hint to the identification of intraductal pancreatic neoplasms and should be evaluated aggressively anytime it is present. Because there is a high chance of cure in the absence of metastatic disease, both lesions are treated with resectional surgery.

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