

Therapeutic and Diagnostic in Mucinous Pancreatic Cancer

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Introduction

Rare pancreatic tumours known as mucinous cystic neoplasms primarily afflict middle-aged women and the body and tail of the pancreas. They have an ovarian-like stroma surrounding them and a mucinous epithelium lining them that can exhibit various degrees of dysplasia. Surgery is the chosen course of treatment when invasive malignancy is not present, and the prognosis is favourable [1]. The most common primary cystic neoplasms of the pancreas are mucinous cystic neoplasms (MCNs). These lesions, which often develop in the body and tail of the pancreas, are distinguished by the presence of ovarian type stroma in the pathological examination. Early identification and excision are essential because mucinous cystic neoplasms have a high risk of developing into malignancy. The majority of cases of mucinous cystic neoplasms are in females. There have only been a few number of cases in male patients before. The patient was referred to our facility as a result of an unintentionally detected cystic lesion in the pancreas tail that was enlarging during serial examination. On the patient, an open distal pancreatectomy was done. A mucinous cystic neoplasm with an ovarian-like stroma and positive oestrogen and progesterone receptors was identified by the histology. According to this case report, mucinous cystic neoplasms can develop in men and should be included in the differential diagnosis of cystic pancreatic tumours in this population [2].

Description

A small portion of pancreatic tumours are pancreatic cystic neoplasms. For instance, mucinous cystic tumours are more prevalent in women in their forties and fifties. Cystic neoplasms of the pancreas may be malignant, borderline, or benign in form. Over time, these tumours transform from a benign condition (mucinous cystadenoma) to a malignant stage (cystadenocarcinoma). The ultimate diagnosis of a cystic tumour, especially a mucinous cystic tumour of the pancreas, is frequently made only after the surgical procedure, which is the gold standard treatment for this ailment. We talk about the example of a patient who had distal splenopancreatectomy after being identified as having a mucinous cystic pancreatic body-tail tumour [3]. The most common pancreatic cystic lesions are pseudocysts, congenital cysts, and cystic neoplasms like mucinous cystic neoplasms, intraductal papillary mucinous neoplasms, and serous cystic neoplasms. Large septated cysts without a ductal connection known as "mucinous cystic neoplasms" are characterised by mucin and stroma with thick, ovarian-type walls. They are typically malignant and more prevalent in women. Resection with surgery is therefore suggested. The primary pancreatic ducts or significant side branches are affected by intraductal

papillary mucinous neoplasms, which have a tall, columnar epithelium that contains mucin [4].

Therefore, a surgical resection is necessary. Serous cystic neoplasms are characterised by many cysts bordered by cubic flat epithelium having glycogen-rich cells with transparent cytoplasm. They often pose no threat and primarily afflict women in their 50s. A cautious approach is therefore suggested. Differentiating between the two pancreatic cystic lesions is essential since both mucinous cystic neoplasm and intraductal papillary mucinous neoplasm have a high potential for becoming cancerous. Numerous imaging techniques and tumour indicators were examined. In spite of this, there are still no reliable methods for separating serous cystic neoplasms from mucinous cystic neoplasms and intraductal papillary mucinous neoplasms. There is still disagreement over how to manage these neoplasms, including which imaging technique to use, how to discriminate between benign and malignant lesions, and which treatment approach is most effective for each pancreatic cystic neoplasm. A thorough guideline for the diagnosis and treatment of mucinous cystic neoplasms, intraductal papillary mucinous neoplasms, and serous cystic neoplasms may result from further research [4].

Diagnoses and treatments for mucinous pancreatic neoplasms are challenging. These tumours are indolent and commonly mimic other pancreatic cyst, pseudocyst, and malignancy types in terms of symptoms and radiological appearance. According to their primary location within the pancreas, some authors have classified all pancreatic mucin-producing tumours as variants of the same basic organism. When assessing chronic stomach discomfort, these disorders should be taken into consideration, especially if a cystic pancreatic lesion is present or if it is accompanied with idiopathic chronic or acute recurrent pancreatitis. Although they are distinct enough to be regarded as independent clinical entities, IMHN and typical mucinous cystic neoplasms share a number of clinicopathologic traits [5].

Conclusion

MDE, on the other hand, produces mucus that enters the primary pancreatic duct, leading to obstructive pancreatitis and ultimately pancreatic duct dilatation. Every time intraductal mucus is detected, it should be aggressively studied because it is a key indicator of the presence of intraductal pancreatic neoplasms. Both lesions are treated with resectional surgery since there is a good possibility of cure in the absence of metastatic disease.

Conflicts of Interest

The authors declare no conflict of interest.

References

1. Fernández-del Castillo, Carlos. "Mucinous cystic neoplasms." *J Gastrointest Surg* 12 (2008): 411-441.
2. Fallahzadeh, Mohammad Kazem, Gazi B. Zibari, Greg Wellman, and Sophia T. Abdehou, et al. "Mucinous cystic neoplasm of pancreas in a male patient: A case report and review of the literature." *J La State Med Soc* 166 (2014): 67-69.
3. Catalano, Giorgio, Francesco Puglisi, Michele De Fazio, and Michele Tedeschi, et al. "Mucinous cystic neoplasm of the pancreas: A case report." *Chir Ital* 61 (2009):375-379.

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4. Jeurnink, S.M., F. P. Vleggaar, and P.D. Siersema. "Overview of the clinical problem: Facts and current issues of mucinous cystic neoplasms of the pancreas." *Dig Liver Dis* 40 (2008):837-846.
5. Lichtenstein, David R and David L. Carr-Locke. "Mucin-secreting tumors of the pancreas." *Gastrointest Endosc Clin N Am* 5 (1995): 237-258.

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