Giant Mucinous Cystadenoma Of The Pancreas: A Rare Aetiology Of An Abdominal Tumor, A Case Report

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Citation

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Abstract

Cystic tumors of the pancreas represent less than 10 % of all the cystic hurts of this organ. Among them, mucinous cystadenomas constitute a very particular anatomo-pathological entity with malignant potential. The purpose of this work is to report a particular case by its clinical presentation display, its size, and the surgical treatment which ensued. We discuss the diagnostic and therapeutic aspects of this condition.

INTRODUCTION

Cystic tumors of the pancreas represent less than 10 % of all the cystic conditions of this organ. Among them, mucinous cystadenomas constitute a very particular anatomo-pathological entity. This pathology defines itself as being a cystic tumor with malignant potential. Its preoperative diagnosis is increasingly refined by the advances of the imaging combined in the draining cystic intra under echo-endoscopy. The purpose of this case report is to describe a particular case by its clinical presentation, its size, and its surgical treatment. We discuss the diagnostic and therapeutic aspects of this condition.

OBSERVATION

A 30-year-old patient, without particular pathological histories was admitted for an abdominal tumefaction evolving during the past 8 months associated with epigastric abdominal pain and occasional vomiting which calmed the pain. On examination, we found a patient in good general condition with normal constants, an enormous abdominal mass measuring 15cm on 20cm, firm, painless, mobile compared with the superficial plan. Laboratory investigations showed an anaemia with a rate of haemoglobin in 9,9g / dl.

The tomodensitometry showed (figure 1) a voluminous cystic mass with fine walls contrast enhancing and developed at the pancreas tail. There were no partitions either of vegetations or calcifications. The neighboring pancreatic parenchyma was of normal aspect and Wirsung duct was not dilated.

The dosage of plasmatic C19-9 had returned normal for 15,7 KU / L.

During median laparotomy we found a voluminous cystic mass of the pancreas tail (figure 2) which contracted multiple adhesions with the transverse colon, small bowel, left kidney and its vein, and the splenic pedicle.

After careful dissection, a left splenopancreatectomy taking the tumor was realized associated with an resection-anastomosis of the adjacent transverse colon. The post-operative care consisted of a triple vaccination (anti meningococcus, anti pneumococcus and anti Haemophilus influenzae) and an antibioprophylaxy with Oracilline. Surgical pathology showed a cystic formation which weighed 4kg with thick and fibrous wall lined on its internal face by a cylindrical epithelial cover secreting mucus. We found some islands of endocrine atrophic cells in periphery or in the shell. There were no suspicious signs of wickedness. The pancreatic section was healthy. The examination ended in a diagnosis of pancreatic mucinous cystadenoma without formal histological signs of wickedness.

DISCUSSION

Cystic tumors of the pancreas represent 10 to 15 % of all the pancreatic cysts and approximately 1 % of the pancreatic

cancers [1]. The mucinous cystadenoma is a tumor slow in devolvement and does not tend to regression. It is a macrocystic tumor united or oligo cystic (less than 6 cysts) limited by a cylindrical mucinous secreting epithelium basing on a pseudo-ovarian stroma with richl cellular content.

The ascendancy is feminine with an average age of 60 years as described by Hardacre [1,2]. However, this pathology was also found in patients much younger as in our case [1,4].

The clinical signs are not specific. The discovery is increasingly fortuitous with the progress of imaging. Our patient was symptomatic and presented with epigastric pains and abdominal mass.

The morphological diagnosis calls on to the combination of several examinations in particular the ultrasound, the Scanner, the MRI, the echo-endoscopy. All these examinations complement each other and their association allows to increase the efficiency of the diagnosis. Lewin [5] considering that these examinations characterize the lesions in 75 % of the cases. The diagnosis of a pancreatic mucinous cystadenoma is easily made in imaging scanning in cases of round hypodense typical lesions, constituted by one or some large-sized cysts (> 2 cms) with presence of a parietal raising and partitions after injection of a contrast agent [5]. In the MRI, the lesion is hypo or hyper intense on sequences balanced in T1 and strongly hyper intense in T2. In echo endoscopy, the wall is easily visible as well as the possible partitions.

In case of atypical lesion, the differential diagnosis has to be made with the cystadenocarcinoma (tissular wall; cystic vegetations), and with the serous cystadenoma which is rather pluri cystic.

The draining of the intra-cystic liquid guided by scanner or at best under echo-endoscopy would have allowed us to refine this diagnosis. It is necessary to underline that for the pancreatic mucinous cystadenoma, ACE is the marker the most discriminating compared with the serous cystadenoma, especially if are measured in more than 400 ng / ml [6]. However this dosage does not allow to distinguish it from a cystadenocarcinoma since the cytological study of the liquid presents a diagnostic sensibility from 34 to 48 % [7].

If it is established that the treatment of the mucinous cystadenoma is surgical because of its malignant potential. The controversy is especially about the operating technique to be adopted. Several authors recommend a radical attitude with a pancreatic resection. Horvath [3] and Hardacre [2] justify this approach by the fact that the differentiation between the mild lesions of those malignant or in malignant potential is uncertain, that the confusions and their consequences are significant in the review of the literature, and that the rate of morbi-mortality of the pancreatic surgery is decreasing; besides, with a curative resection there is a good prognosis. The mortality in the series of Hardacre was 3,3 %. He had a complication rate of 58 % (13,3 % of pancreatic fistula). This approach, according to Goh [8] must be moderated and reserved for experienced centers and young patients. Enucleation was proposed in the cases where the resection constituted a great burden for the patient, in particular a cephalic duodenopancreatectomy. This enucleation was suggested by Sciaudone as an alternative in pancreatic resection with realizing an complete ablation of the cystic wall and enabling the verification by an extemporane examination of the margins [9]. Compared with the pancreatic resection, the mortality of enucleation is very low; however, the rate of fistulas can reach 50 % [10].

CONCLUSION

Pancreatic mucinous cystadenoma is a rare condition with a known feminine ascendancy. It does not present with clinical peculiarities and is discovered increasingly in a fortuitous way with the advance of imaging techniques. Its preoperative diagnosis rests on the results of this imaging techniques allowing to characterize the pathology. When these cysts are atypical, the draining of intracystic fluids for cytochimic study constitute a good diagnostic option. The treatment consists of a surgical resection which modalities depend on schools and on the state of the sick person. It shows satisfactory results.

Figure 1

Tomodensitomety of the pancreatic tail cystadenoma mucinous

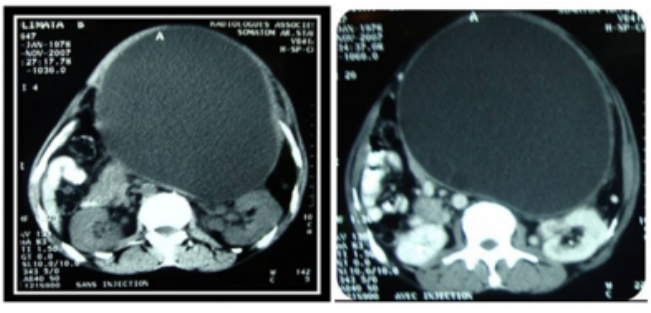
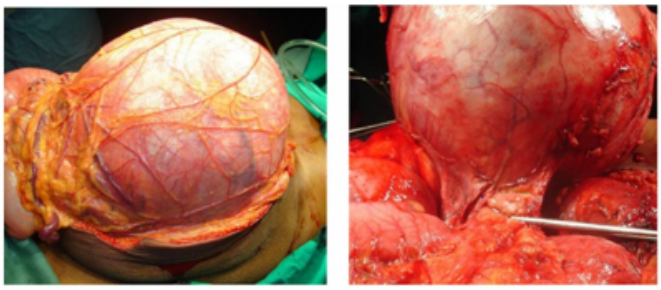


Figure 2

Per operative view of the pancreatic mucinous cystadenoma



References

1. Lau ST, Kim SS, Lee SL, Schaller RT. Mucinous Cystadenoma of the Pancreas in a One-Year-Old Child J Pediatr Surg 2004; 39:1574-1575.
2. Hardacre JM, Mcgee MF, Stellato TA, Schulak JA. « An aggressive surgical approach is warranted in the management of cystic pancreatic neoplasms » Am J. Surg. 2007; 193: 374–379.
3. Horvath KD, Chabot JA. « An Aggressive Resectional Approach to Cystic Neoplasms of the Pancreas » Am J. Surg. 1999; 178: 269-274
4. Fourati M, Mzali R, Zouari R, Ounissi A, Sahnoun Y, Jlidi R, Beyrouti I. Le cystadénome mucineux du pancréas. A propos d'une observation. Tunis. Chir. 1995;1:38-41.
5. Lewin M, Hoeffel C, Azizi L, Lacombe C, Monnier-Cholley L, Raynal M, Arrive L, Tubiana JM. « Imagerie des lésions kystiques du pancréas de découverte fortuite » J. Radiol. 2008; 89: 197-207.
6. Hammel P. « Intérêt diagnostique de l'analyse du liquide de ponction des lésions kystiques du pancréas : données actuelles, limites et perspectives » J. Radiol. 2000;81:487-490.
7. Lazure T, Alsibai KD, Fabre M. « Cytologie sous échoendoscopie des tumeurs kystiques du pancréas : utilité et limites » Ann. Pathol. 2006; 26 :352-360.
8. Goh BKP, Tan YM, Cheow PC, Chung YFA, Chow PKH, Wong WK. « Cystic lesions of the pancreas: an appraisal of an aggressive resectional policy adopted at a single institution during 15 years » Am J. Surg. 2006; 192: 148–154.
9. Sciaudone G., Perniceni T., Lévy P., Bougaran J., Gayet B. « Enucléation de tumeur intracanalaire papillaire et mucineuse de la tête du pancréas: à propos de 2 cas » Gastroentérol. Clin. Biol. 2000;24:121-124.
10. Talamani MA, Moesinger R, Yeo CJ, Poulose B, Hruban RH, Cameron JL. « Cystadenomas of the pancreas: Is enucleation an adequate operation? » Ann. Surg. 1998;227:896-903.

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