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

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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 echoendoscopy. 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...
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cancers [1]. The mucinous cystadenoma is a tumor slow in
devolvement and does not tend to regression. It is a
macro cystic 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
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 ascendance. 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

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Figure 2
Per operative view of the pancreatic mucinous cystadenoma

References
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