

Cystic Tumors Of Pancreas: Diagnostic And Therapeutic Strategy

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Citation

M Seck, M Cissé, M Diao, A Touré, I Konaté, O Ka, M Dieng, C Touré. *Cystic Tumors Of Pancreas: Diagnostic And Therapeutic Strategy*. The Internet Journal of Surgery. 2014 Volume 32 Number 1.

DOI: [10.5580/IJS.16003](https://doi.org/10.5580/IJS.16003)

Abstract

Cystic tumors of the pancreas arise problems preoperative diagnosis. Now this is the diagnostic certainty that determines surgical indications. Aim: To report our support diagnosis and treatment of these tumors. Patients and methods: it is a retrospective study of six patients with a mean age of 32 years with extremes of 22 and 61 years. The parameters studied were the diagnostic and therapeutic data. Results: The reason for consultation was a mass of epigastric or left upper quadrant in 3 cases and abdominal pain in 3 cases. The tumor marker Ca19.9 was normal in 2 cases and the ACE marker slightly elevated in 1 case. The scanner evoked a cystic mass in the tail of the pancreas in 5 cases and magnetic resonance imaging (MRI) intra-papillary mucinous tumor of the pancreas probably degenerate of the pancreas's head in 1 case. Preoperative presumptive diagnosis was mucinous cystadenoma in 3 cases, a solid pseudopapillary tumor in 1 case, an degenerated in 1 case and a false cyst of the pancreas in 1 case. The surgical exploration showed 5 cases of tumor developed at the expense of the tail and 1 case at the expense of the pancreatic head, peripheral lymph nodes were found in 2 cases. We performed a caudal pancreatectomy (CP) in 4 cases whose 1 case after a cyst-jejunal bypass first, cephalic duodeno-pancreatectomy (CDP) in 1 case and surgical abstention with lymph node biopsy in 1 case. Adjuvant chemotherapy was associated in 1 case. The histology of surgical specimens found 1 case of mucinous cystadenoma, 1 case of solid pseudopapillary tumor of the pancreas and 1 case of IPMT degenerated into adenocarcinoma. The postoperative course was uneventful. Conclusion: The diagnostic certainty of cystic tumors of the pancreas is necessary to allow a conservative or radical gesture. In our context, the preoperative diagnosis is difficult. Scanner, MRI and tumor markers intra cystic can help in the diagnosis.

INTRODUCTION

Cystic tumors of the pancreas have a real problem of preoperative diagnosis. However, only the diagnostic certainty may authorize a conservative gesture or legitimize radical surgery. In reality, different biological and radiological characteristics of each particular injury do not always correspond to reality. Thus, the surgical management of these tumors based on the presumptive diagnosis may not be an appropriate attitude. The aim of our study was to report our experience in the management of cystic tumors of pancreas.

PATIENTS AND METHODS

This was a retrospective study of six patients, mean age of 32 years with extremes of 22 and 61 years old. There were 5 women and 1 man with a sex ratio of 0.2. The parameters studied were the diagnostic and therapeutic data.

RESULTS

Clinical data

The clinic was fairly homogeneous with two major signs: pain and abdominal mass (Table I)

Table 1

Distribution of clinical patients

	Blanche S.	Seye Nd.	Oulim. B.	Yaye S. D.	Mbaye D.	Marim D.
Reason for consultation	Mass left hypochondrium	Abdominal pain	Epigastric mass + vomiting	Abdominal pain	left hypochondrium pain	Right hypochondrium pain + itching + jaundice
Physical examination	Mass firm, mobile and non-painful	Mass firm, mobile and non-painful	Sensitive epigastric mass	Firm and painless mass in the left hypochondrium	Normal abdominal examination	Firm and tender mass in the right hypochondrium

Biological data

Ca19.9 dosed in 3 cases was normal and the CEA (Carcinoembryonic Antigen) measured in 1 case was very low (Table II).

Table 2

Distribution of patients according to biological markers

	Blanche S.	Seye Nd.	Oulim. Bâ	Yaye S. D.	Mbaye D.	Marième D.
Ca 19.9	< 0,6 U/L (Normal)	-----	15,7 U/L (Normal)	4,5 KU/L (Normal)	-----	-----
CEA	-----	-----	-----	-----	-----	4,2 ng/ml (very low)

Radiological data (Figure 1)

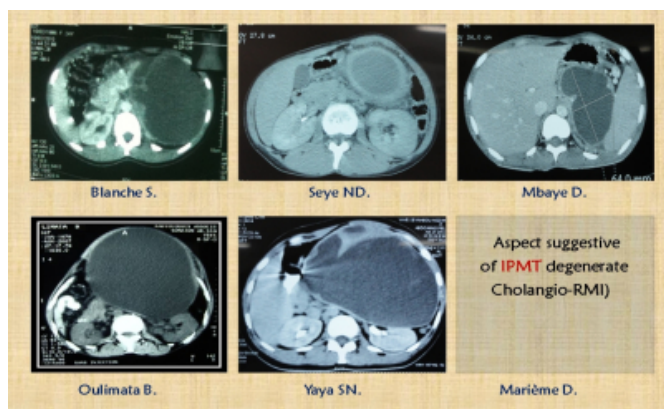
Computed tomography (CT) was performed in 5 patients and was objectified:

- 3 cases of macrocystic lesions, unilocular, thick-walled, strongly enhanced by the contrast, developed at the expense of the pancreatic tail and evocative of mucinous cystadenoma;
- 2 cases of macrocystic lesions, unilocular, with a bud tissue developed at the expense of the pancreatic tail and evocative of solid pseudopapillary tumor.

Magnetic Resonance Imaging (MRI) was performed in 1 case and showed a cystic lesion communicating with the pancreatic duct with irregular contours, evocative of Intraductal Papillary Mucinous Tumor of the pancreas (IPMT) degenerate.

Figure 1

Radiological data



Surgical and histological data

All patients were operated under general anesthesia (GA), after installing supine on ordinary operating table. The common surgical approach to all patients was a supraumbilical transverse laparotomy.

Surgical exploration objectified (Figure 2) :

- a tumoral lesion of the pancreatic tail in 5 in cases which 1 case evocative of Pancreatic pseudocyst (Blanche S.), 3 cases of cystic tumor (Seye ND, Oulimata B and Yaye

SN.) and 1 case of tumor indurated, very adherent and suspicious of malignancy (Mbaye D.) .

- a tumoral lesion of 2 cm of the head of the pancreas in 1 case (Marième D.)

The remainder of the pancreatic gland was normal appearance in all cases.

The indication of a partial pancreatectomy was raised in 5 patients (Figure 2). It was:

- a caudal pancreatectomy and splenectomy in 3 case which 1 case with cysto-jejunostomy first (Blanche S, Seye ND and Oulimata B.) before a biopsy in favor of Pseudopapillary solid tumor of the pancreas.
- a caudal pancreatectomy without splenectomy in 1 case (Yaye SN.).
- a cephalic duodeno-pancreatectomy in 1 case with mounting according DELCOR that is to say hepaticojejunostomy anastomosis, gastro-entero-anastomosis and pancreatogastric anastomosis (Marième D.).

Therapeutic abstention was made with a biopsy in 1 case because of indurated, adherent and highly suspicious nature of the tumor (Mbaye D).

The postoperative course was uneventful in all patients and polyvaccination against meningococcal and Haemophilus influenzae was administered immediately to the 3 patients who underwent splenectomy associated with pancreatic gesture.

Adjuvant chemotherapy with cisplatin was established in 1 case (Marième D.).

In histologically, examination of surgical specimens was back in favor:

- a solid pseudopapillary tumor of the tail of the pancreas in 1 case (Blanche S.);
- a mucinous cystadenoma of the tail of the pancreas in 1 case (Oulimata B.);
- a cystic endocrine tumor in 1 case (Yaye SN.);
- a mucinous adenocarcinoma of the pancreatic head (Marième D.).

But in two cases, the histology was not contributory, despite strong macroscopic and radiological suspicion in 1 case (Seye ND).

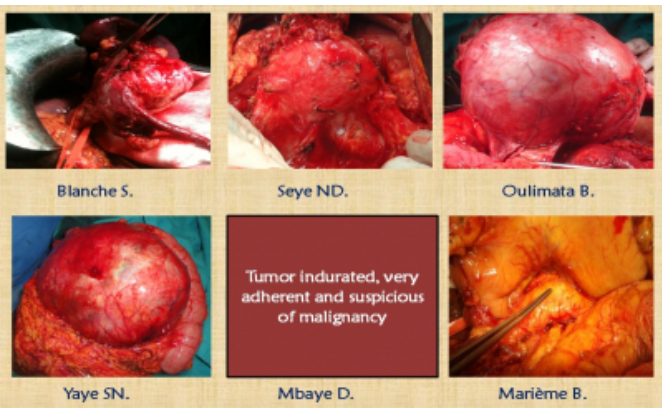
DISCUSSION

Epidemiology

Epithelial tumors of the exocrine pancreas are the most common pancreatic tumor lesions. Outside of serous cystadenoma, they are malignant or have some potential malignancy (Table III).

Figure 2

Operating data (Exploration)



Clinical

Clinically, the major problem is the lack of specificity of signs. Indeed, the two main signs are abdominal mass and abdominal pain which may be mistakenly blamed on an acute pancreatitis [4; 7]. The discovery of these lesions is often accidental. This was reported teams Napoleon and Hammel. In this situation, the benign lesion as malignant usually [3; 8].

Imagery

The radiological point of view, CT is certainly less efficient than the association Magnetic Resonance Imaging and Echoendoscopy. But it may be sufficient for diagnosis as it allows histological presumption in 20-45% of cases after studying Planner [9]. In our study, this presumption radiological (MRI and CT + + +) was consistent with the final histological results in 3 cases / 6. However, the combination of these three tests has been recommended by the French Society of Digestive Endoscopy [1]. However, radiology has some limitations. According Hammel [3]:

radiology is not sufficient to diagnose preoperative mucinous cystadenoma;

Cytology is essential when the lesion suggests a mucinous cystadenoma radiologically, while in practice the rate of Ca19.9 and CEA are not always consistent.

Some lesions such as Pseudopapillary solid tumor of the pancreas present radiologically irregular wall and against

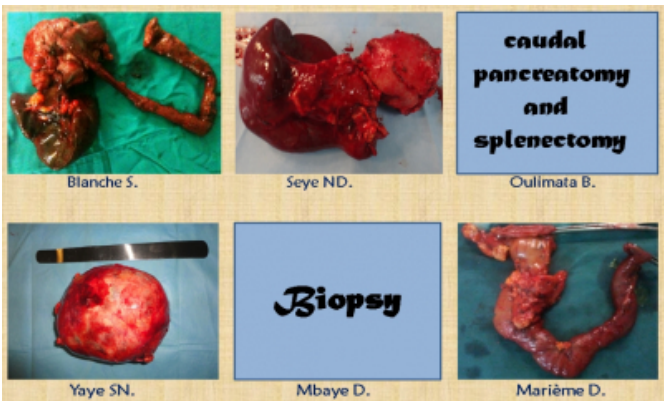
any puncture-show for cytochemistry, while in practice, the wall of this lesion may be regular, as in our study, and lead inadvertently to this gesture.

Histology

Histologically, the puncture is only recommended in the case of benign lesions radiographically [1; 3]. However, the cytochemical study of the aspirate may suggest the diagnosis. Indeed, the CEA and Ca19.9 markers are very high in mucinous cystadenoma while they are normal in serous cystadenoma. In the first case, the cells are epithelioid and positive to Alcian blue, then they are cuboidal and rich in glycogen in the second case. In Intraductal papillary mucinous tumor of the pancreas, these markers are very high (Table IV).

Figure 3

Operating data (Surgical specimens)



These results do not correspond to those of our study where Ca19.9 was normal in a genuine case and a highly suggestive case of mucinous cystadenoma. Further, the CEA level was high in our study discreetly where the patient had Intraductal papillary mucinous tumor of the pancreas degenerate as adenocarcinoma, while it is reater than 110 ng / ml in the literature. Histological results in our study confirm the difficulty to discern these tumors on the basis only of imaging, cytology and macroscopic. Indeed, the endocrine tumors, particularly non-functional may have cystic presentation and lend to confusion with mucinous cystadenoma, as is the case of one of our patients. Severity is related to the fact that the first is usually a malignant tumor and a second benign lesion.

Therapeutic strategy

Surgery

Outside of serous cystadenoma, surgical indication is always appreciated, even if some authors do recommend that when the lesion is symptomatic or when tumor size exceeds 2 or 4 cm [2; 6, 9]. The type of surgery is significantly conditioned by the Benin or malignant lesion, which is difficult to determine preoperatively. The surgical procedure also depends on the tumor location. There may be a case of cephalic duodeno-pancreatectomy cephalic when the location is cephalic or left pancreatectomy when the location is corporeo-caudal. The enucleation is possible, but only if it is complete and that the frozen section examination is available [4; 5; 10].

Abstention

In the case of serous cystadenoma, surgical abstention should be the rule.

CONCLUSION

Cystic tumors of the pancreas pose a real problem of preoperative diagnosis. This makes the treatment is most often a radical surgical resection (gesture which is not always appropriate) for 2 reasons: the fear of cancer (cystadenocarcinoma and adenocarcinoma) firstly and the risk of some degeneration secondarily (precancerous lesions).

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