



Case Report

Macrocytic serous cystadenoma of the pancreas: Report of 4 cases



Riccardo Pravisani^a, Sergio Giuseppe Intini^{a, *}, Rossano Girometti^b, Claudio Avellini^c,
Cosimo Alex Leo^a, Walter Bugiantella^d, Andrea Risaliti^a

^a Dipartimento di Scienze Mediche e Biologiche, Università degli Studi di Udine, Piazzale Kolbe, 4, 33100 Udine, Italy

^b Institute of Radiology, University Hospital "S. Maria della Misericordia", Udine, Italy

^c Institute of Pathology, University Hospital "S. Maria della Misericordia", Udine, Italy

^d General Surgery, AUSL Umbria 2, Italy, PhD School of Biotechnologies, University of Perugia, Italy

ARTICLE INFO

Article history:

Received 20 March 2015

Received in revised form

27 March 2015

Accepted 10 April 2015

Available online 26 June 2015

Keywords:

Serous cystadenoma

Macrocytic

Cystic pancreatic neoplasm

Pancreas

ABSTRACT

Background: Macrocytic serous cystadenomas (MaSCA) are rare benign tumor of the pancreas which represent an atypical macroscopic morphologic variant of serous cystadenomas (SCA). They are characterized by a limited number of cysts with a diameter of >2 cm and share imaging features overlapping those of mucinous cystic neoplasm (MCN) and branch-duct intraductal papillary mucinous neoplasm (BD-IPMN), thus frequently making the pre-operative radiologic diagnosis difficult.

Materials and methods: Four cases of MaSCA, which were surgically treated in our structure, are reported. **Results:** Two women (62 and 39 year-old) presented with upper abdominal pain and palpable mass underwent CT with evidence of a lobulated cystic neoformation (98 × 70 and 94 × 75 mm respectively) originating from the body and the tail of the pancreas respectively. They underwent distal pancreatectomy for suspected MCN. A 38 year-old woman underwent laparoscopic distal pancreatectomy because of the incidental finding of an unilocular cystic lesion in the pancreatic tail (23 mm) of indeterminate origin (MCN, SCA or metastasis). In a 40 year-old woman, admitted for acalculous acute pancreatitis, an unilocular cystic lesion in the body of the pancreas (62 mm) was detected and confirmed after 2 months at CT, therefore she underwent distal pancreatectomy for suspected pseudocyst or SCA. In all of the 4 patients the histological examination of the specimens revealed a MaSCA.

Conclusion: Imaging techniques have a low diagnostic power in terms of differentiation of MaSCA from malignant lesions (as MCNs and BD-IPMN). In the clinical practise of MaSCA, surgery appears to gain indications that are wider than those correlated to the pathologic outcome, because of the necessity of a correct differential diagnosis from potentially malignant cystic tumors and the frequent symptoms requiring treatment.

© 2015 IJS Publishing Group Limited. Published by Elsevier Ltd. All rights reserved.

Abbreviations: SCA, Serous Cystadenoma; MaSCA, Macrocytic Serous Cystadenoma; MCN, Mucinous Cystic Neoplasm; BD-IPMN, Branch Duct - Papillary Mucinous Neoplasm; CT, Computed Tomography; HU, Hounsfield Units; BMI, Body Mass Index; MRI, Magnetic Resonance Imaging; EUS, Endoscopic Ultrasonography; FNA, Fine Needle Aspiration; MRCP, Magnetic Resonance Cholangiopancreatography; MCA, Mucinous Cystadenoma.

* Corresponding author. Dipartimento di Scienze Mediche e Biologiche, Università degli Studi di Udine, Piazzale Kolbe, 4, 33100 Udine, Italy.

E-mail addresses: riccardo.pravisani@gmail.com (R. Pravisani), sergio.intini@uniud.it (S.G. Intini), rossano.girometti@uniud.it (R. Girometti), claudio.avellini@uniud.it (C. Avellini), cosimoleo@gmail.com (C.A. Leo), walterbugiantella@alice.it (W. Bugiantella), andrea.risaliti@uniud.it (A. Risaliti).

1. Introduction

Serous cystadenoma (SCA) represents a form of pancreatic cystic neoplasm which accounts for 10–15% of pancreatic tumors and is characterized by benign behavior and heterogeneous macroscopic features [1–3].

Although the microscopic structure of pancreatic SCA is uniform, the macroscopic feature shows a wide heterogeneity. The typical appearance is microcystic with a sponge-like or honeycomb texture, but solid or macrocystic variants are reported with increasing frequency. The macrocystic serous cystadenomas (MaSCA) is characterized by a limited number of cysts, usually less than 6, showing a diameter >2 cm [4–6].

Although many classifications have been reported a consensus has not been established and still a confounding terminology persists [3,6,7]. MaSCAs are variably reported also as oligocystic, multicystic, oligolocular, unilocular [2,3,5–10]. Some authors consider macrocystic even cysts with a diameter of 1–2 cm, if unilocular [11,12]. The overall estimated incidence of MaSCA is 10% of all cases of SCA [1,8].

A correct pre-operative diagnosis can be difficult since the radiologic features of MaSCA are frequently undistinguishable from those of mucinous cystic neoplasm (MCN) and branch-duct intra-ductal papillary mucinous neoplasm (BD-IPMN) which both have a malignant potential [4,5,8,10–13]. Moreover, if in the patient's past medical history episodes of acute pancreatitis are reported, pseudocyst enters the differential diagnosis [13].

2. Material and methods

Between January 2009 and March 2014 a total of 48 cases of cystic pancreatic neoplasms were surgically treated in the general surgery and transplantation unit of the University Hospital of Udine. Among these, 4 turned out to be MaSCAs. Demographic, clinical and histopathologic data of these patients were retrospectively reviewed.

3. Cases report

A 62 year-old woman in overall good clinical conditions and without a significant past medical history presented with recurrent dull epigastric discomfort and a palpable abdominal mass. A multiphase contrast-enhanced CT scan showed a unilocular, lobulated without septation, cystic neof ormation originating from the body of the pancreas with extrinsic growth and occupying the hepatogastric space. No mural nodules, satellite cysts or calcifications were associated with the cystic wall, which was thin. The cystic content showed homogeneous fluid attenuation of about 15 HU without evidence of septations. The largest diameters on the transverse plane were 98 × 70 mm. No other lesions were identified. CA 19.9, CEA and CA 125 serum level were within the normal range. The patient's general practitioner planned a conservative management and three months after the diagnosis a control CT scan was repeated showing a significant increasing in the dimensions of pancreatic neof ormation (120 × 100 mm), thus causing a marked compression on the splenic and the inferior mesenteric veins. Cystic content persisted homogeneously fluid (about 20 UH). Repeated dosage of serum tumor markers showed no level variation. Based on radiological features, a mucinous cystadenoma was suspected. Thus, the patient was referred to us and consequently underwent laparotomic distal spleno-pancreatectomy. The post-operative course was uneventful. The level of CA 125, CEA, CA 19-9 and CA 15-3 in the cystic content were 14560 UI/ml (n.v. <30), 8.8 ng/mL (n.v. <3), 45356.7 UI/ml (n.v. <31) and 65.2 UI/ml (n.v. <32) respectively. The histological examination of the specimen revealed a MaSCA.

A 39 year-old woman in overall good clinical condition presented with recurrent upper abdominal pain. A palpable mass was evident in the left hypocondrium upon physical examination. Routine blood tests and tumor markers levels were within the normal range. The patient was investigated with a multiphase contrast-enhanced CT scan and MRI which showed a lobulated cystic lesion of the pancreatic tail with septation and lobulated margins. The largest diameters on the transverse plane were 94 × 75 mm and it compressed the stomach, the spleen and the splenic vein. The pre-operative diagnosis was MCN. The patient underwent laparotomic distal pancreatectomy with splenectomy. No complication occurred during the post-operative course. The

histological examination of the specimen revealed a MaSCA.

A 38 year-old obese (BMI 37) woman, who had previously undergone total thyroidectomy and adjuvant radiometabolic therapy because of a multicentric papillary carcinoma of the thyroid (pT3N1M0), was referred because of the incidental finding of a cystic lesion in the pancreatic tail of unknown origin. Tumor markers serum levels were within the normal range; thyroglobulin serum level was negative. Contrast-enhancement MRI showed a single unilocular ovoid cyst with lobulated margins and simple fluid content in the pancreatic tail, delimited by a thin wall showing moderate contrast-enhancement. A thin internal septum was observed, showing no contrast enhancement. No mural nodules were visible. Neither an increase in size (23 mm) nor changes in radiological features were observed compared to a CT performed 3 months before. It was difficult to establish whether a communication with the main pancreatic duct was present because of the compression by the cyst. EUS identified an area in the lesion suspicious for a wall nodule or a mucin deposit; while FNA examination was not conclusive. The pre-operative diagnostic suspects were MCN, SCA, or a distant metastasis of thyroid carcinoma. The patient underwent laparoscopic distal pancreatectomy without splenectomy. The post-operative course was uneventful. The histological examination of the specimen revealed a MaSCA.

A 40 year-old obese woman in overall good clinical conditions and without a relevant past medical history was admitted for acalculous acute pancreatitis. She underwent a multiphase contrast-enhanced CT scan 72 h after the onset of symptoms which showed a cystic lesion in the body of the pancreas; it measured 62 mm in diameter and was unilocular with lobulated margins but without septation. The pancreatic parenchyma, which was distal to the lesion, was edematous with a dilatation of the main pancreatic duct and of the branch ducts. The patient was managed conservatively and the episode resolved rapidly within a few days. After 2 months the CT scan showed the persistence of the cystic lesion, therefore MRI and EUS were performed confirming the dimension (without growth) and the morphology of the lesion and the persistence of the pancreatic ducts dilatation. FNA was performed showing normal CEA and amylase levels, increased CA-19.9 level (15499 UI/ml); the cytologic examination resulted not diagnostic. Serum tumor markers levels were within the normal range. Pre-operative differential diagnosis included pseudocyst and SCA. The patient underwent laparotomic distal pancreatectomy with splenectomy. The post-operative course was uneventful. The histological examination of the specimen revealed a MaSCA.

4. Discussion

The clinical series by Lewandrosky in 1992 was the first report who identified the macrocystic form as a specific and distinct variant of the SCA of the pancreas [14]. Thereafter, the WHO in 1996 subclassified the serous cystadenoma in microcystic adenoma, macrocystic/oligocystic adenoma and cystadenocarcinoma [10].

Several descriptions for a typical radiologic feature of macrocystic variant have been proposed with the aim to maximize the possibility of making a correct pre-operative diagnosis, thus distinguishing this benign lesion from potentially aggressive tumors as MCN, BD-IPMN and cystadenocarcinoma which share the same macrocystic structure [4,5,8,10–13]. The malignant progression from SCA to serous cystadenocarcinoma is an extremely rare event with a reported incidence of 1–5% [15,16]. The diagnosis can be established just in presence of locoregional direct invasion or distant metastasis, since the histological feature of these malignant lesions is usually indistinguishable from their benign counterparts. Several parameters have been investigated to identify any predictive factor for aggressive behavior. Those with the highest evidence

Download English Version:

<https://daneshyari.com/en/article/4285756>

Download Persian Version:

<https://daneshyari.com/article/4285756>

[Daneshyari.com](https://daneshyari.com)