J Surg Med. 2018;2(3):396-398.
DOI: 10.28982/josam.431576

Journal of Surgery and Medicine
e-ISSN: 2602-2079

A case of pancreatic cyst hydatid misdiagnosed as pancreatic cancer

Pankreatik kanser olarak yanlış tanı konan bir pankreatik kist hidatik olgusu

Anas Belhaj [1], Ouazzani Et-Tayeb [1], Zerhouni Ahmed [1], Souiki Tarik [1], Karim Ibn Majdoub Hassani [1], Imane Toughrai [1], Khalid Mazaz [1]

[1] Department of Visceral Surgery B, Hassan II University Hospital, Fez, Morocco

ORCID ID of the authors
AB: 0000-0002-1118-1594
OET: 0000-0003-2977-2904
ZA: 0000-0001-8441-016X
ST: 0000-0002-2416-4355
KIMH: 0000-0002-0421-7296
IT: 0000-0003-0401-3012
KM: 0000-0001-7779-7802

Corresponding author / Sorumlu yazar:
Anas Belhaj
Address / Adres: Department of Visceral Surgery B, Hassan II University Hospital, Fez, Morocco
e-Mail: dr.anasbelhaj@gmail.com

Informed Consent: The author stated that the written consent was obtained from the patient presented in the study.
Hasta Onamı: Yazar çalışmada sunulan hastadan yazılı onam alındığını ifade etmiştir.

Conflict of Interest: No conflict of interest was declared by the authors.
Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Financial Disclosure: The authors declared that this study has received no financial support.
Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

Received / Geliş tarihi: 07.06.2018
Accepted / Kabul tarihi: 29.06.2018
Published / Yayın tarihi: 14.07.2018

Abstract
Hydatid disease, is a zoonotic infection caused by the Echinococcus parasite, localized especially at the liver, herein we described a case which presented with epigastric pain and Hydatid cyst of the pancreas. 19-year-old female with a history of stage B pancreatitis one month ago presented with epigastric pain, and her physical examination showed an epigastric mass 5 cm in diameter. Abdominal computed tomography showed a pancreatic tumor: Cystadenoma or Cystadenocarcinoma. Magnetic resonance imaging showed a mucinous intra-papillary tumor of the pancreas without signs of degeneration. Echo endoscopy realized talks about an aspect of a pseudo papillary solid tumor of the pancreas or false cyst of the pancreas. Surgery discovered finally a hydatid cyst of the pancreas, then a medial pancreatectomy was performed with anastomosis between the tail of the pancreas and the stomach. In conclusion, hydatid cyst of the pancreas should be considered in the differential diagnosis of cystic lesion of the pancreas, and in some cases surgery remains the only definitive diagnostic and therapeutic tool.
Keywords: Hydatid disease, Pancreas, Medial pancreatectomy

Öz
Hidatik hastalık, özellikle karaciğerde lokalize olan Echinococcus parazitinin neden olduğu zoonotik bir enfeksiyondur. Burada epigastrik ağrı ve pankreasın hidatik kisti ile başvuran bir olguyu tanımladık. Bir ay önce evre B pankreatit öyküsü olan 19 yaşında kadın hasta epigastrik ağrı ile başvurdu ve fizik muayenesinde 5 cm çapında epigastrik kitle saptandı. Abdominal bilgisayarlı tomografide pankreas tümörü görüldü: kistedenom yada kistadenokarsinom. Manyetik rezonans görüntülemede dejenerasyon belirtileri olmaksızın pankreasın intra-papiller tümörüne rastlandı. Eko endoskopi pankreasın pseudo papiller solid tümörünün veya pankreasın yanlış kistinin bir yönüyle ilgili görüşmelerde bulundu. Ameliyat sonunda nihayetinde pankreas kist hidatiği saptandı, daha sonra pankreas ve midenin kuyruğu arasında anastomoz ile medial pankreatektomi yapıldı. Sonuç olarak, pankreasın kistik lezyonunun ayırıcı tanısında pankreasın hidatik kisti düşünülmeli ve bazı olgularda cerrahi tek kesin tanı ve tedavi aracı olarak kalmaktadır.
Anahtar kelimeler: Hidatik hastalık, Pankreas, Medial pankreatektomi

Introduction

Hydatid disease, or echinococcal disease, is a zoonotic infection caused by the Echinococcus parasite, it's endemic to regions where stock-breeding and agriculture are a common occupation, and these include the Mediterranean region, Africa, South America, Australia, Middle East and India. Hydatid cysts are localized especially at the liver (84%), lung (15%–47%), spleen (12%) [1]. But it can be found in all body organs. We describe a case which presented with epigastric pain and cystic pancreatic mass.

Case presentation

Young 19-year-old female housewife, rural resident and having contact with dogs. With a history of stage B pancreatitis one month ago. The clinical symptomatology dates back to 2 years by the occurrence of intermittent epigastric pain which has been aggravated since a month by a permanent character, all evolving in a context of apyrexia and conservation of the general state. The physical examination showed an epigastric mass 5 cm in diameter, painless and mobile. The biological assessment was without particularity in particular negative tumor markers and negative hydatid serology.

Abdominal computed tomography (CT) showed a cystic mass of the body of the multi-localized pancreas measuring 7 cm in diameter with dilation of wirsung at 2.4 cm, this mass is in favor of a pancreatic tumor Cystadenoma or Cystadenocarcinoma (Figure 1).

How to cite / Atıf için: Belhaj A, Et-Tayeb O, Ahmed Z, Tarik S, Hassani KIM, Toughrai I, Mazaz K. A case of pancreatic cyst hydatid misdiagnosed as pancreatic cancer. J Surg Med. 2018;2(3):396-398.

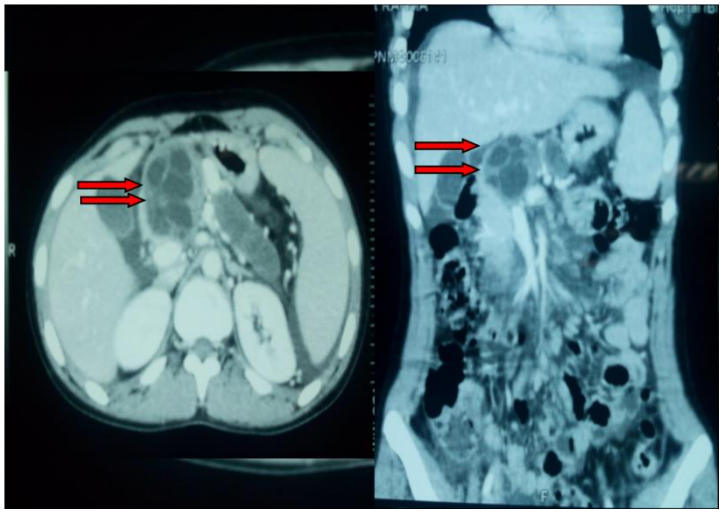

Figure 1: Computed tomography scan shows the hydatid cyst of the pancreas.

On the other hand an abdominal magnetic resonance imaging shows of a mass of the pancreatic isthmus of 5 cm clearly communicating with the wirsung which is dilated at the level of its corporal-caudal part measuring 16 mm of diameter, no fleshy bud either in the mass or in the wirsung this aspect is in favor of a mucinous intra-papillary tumor of the pancreas without signs of degeneration (Figure 2).

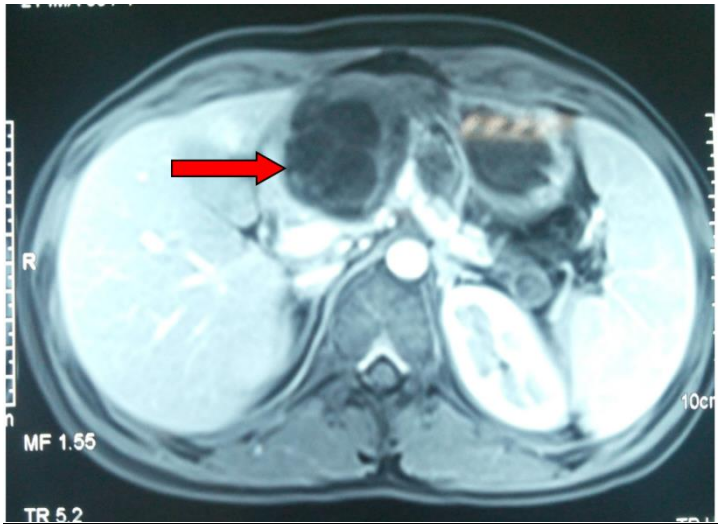

Figure 2: Magnetic resonance imaging of the hydatid cyst occupying the body of the pancreas

In front of the doubt diagnosis an echo endoscopy was realized: aspect in favor of a pseudo papillary solid tumor of the pancreas or false cyst of the pancreas. The patient's file was discussed in multidisciplinary meeting and the decision was a surgical exploration.

Surgical exploration showed the presence of a cystic mass at the expense of the pancreatic isthmus and extending towards the tail of the pancreas, while the head was intact, the dissection showed that the portal vein is taken in the mass. The dissection was at the cost of a wound of the portal vein difficult to control hence the decision to open the mass to quickly control the bleeding. The opening of the mass finally objectified a hydatid cyst type III with vesicles and a cavity that continues with the wirsung duct towards the tail of the pancreas, after bleeding control a medial pancreatectomy with wirsung-to-gastric anastomosis was performed. Drainage by two drains (Figure 3). The evolution was marked by the occurrence of a pancreatic fistula which has dried up.

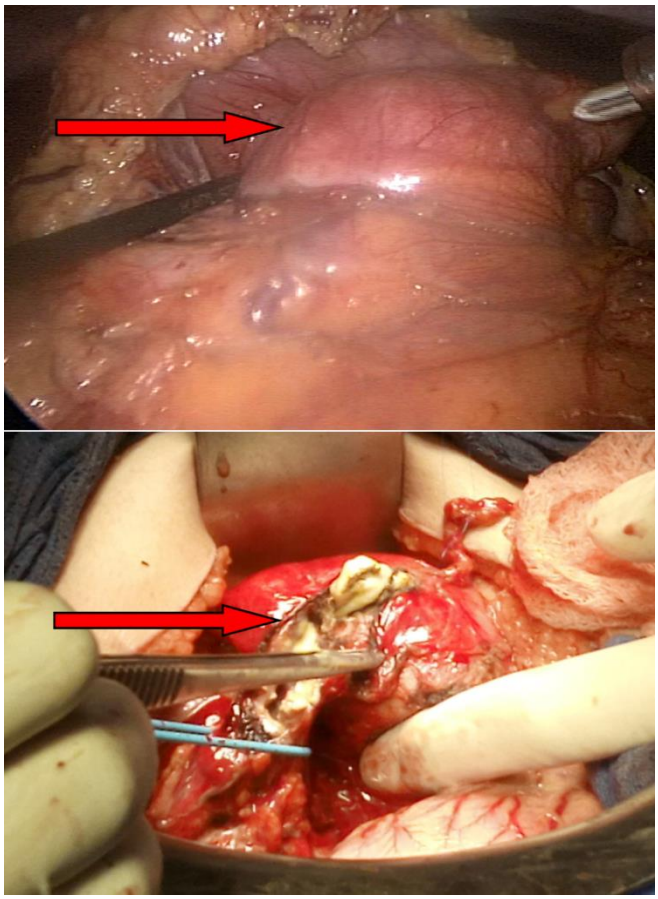

Figure 3: Intraoperative image showing the hydatid cyst and the vesicle outlet after opening.

Discussion

Primary hydatid disease of the pancreas is indeed rare [2]. So the diagnosis of pancreatic hydatid cyst may be a challenge. Usually, hydatid cysts are usually asymptomatic; however, patients may present with abdominal pain, vomiting or complications such as obstructive jaundice or pancreatitis. The Enzyme-Linked Immunosorbent Assay (ELISA) Echinococcus antigens is a useful tool with a global specificity about 85%, which is not always positive in the presence of hydatid cyst. [3]. Definitive diagnosis can be made only at surgery. The differential diagnosis of hydatid cyst of the pancreas includes pseudocyst, serous cystadenoma and mucinous cystic neoplasm. The difference between a hydatid cyst and a cystic lesion of the pancreas must be made.

Abdominal sonography is considered the most sensitive tool detecting the floating membranes, hydatid sand and floating daughter cysts. Water lily sign, water attenuation and calcifications detected by CT scanning are also highly suggestive of hydatid cyst [4]. Endoscopic ultrasound can provide characterization of cystic lesions of the pancreas. While EUS morphology alone has limitations regarding definitive diagnosis fluid aspirates can help in differentiating malignant cystic lesions. Serology is more specific but less sensitive than imagery [5]. The surgical treatment of the pancreatic hydatid cyst depends on its location, as in our case the cyst is located at the level of the body of the pancreas with wide communication with the wirsung so a medial pancreatectomy with pancreatic gastric anastomosis was performed, while the cysts in the body and the head pancreas without communication with the wirsung can be treated by a good evacuation, pericystectomy and omentoplasty.

We conclude that hydatid cyst of the pancreas should be considered in the differential diagnosis of cystic lesion of the pancreas, and in some cases surgery remains the only definitive diagnostic and therapeutic tool.

References

1. Derfoufi O, Ngoh Akwa E, Elmaataoui A, Miss E, Esselmani H, Lyagoubi M, et al. Epidemiological profile of echinococcosis in Morocco from 1980 to 2008. Ann Biol Clin (Paris). 2012 Jul-Aug;70(4):457-61.
2. Masoodi MI, Nabi G, Kumar R, Lone MA, Khan BA, Naseer Al Sayari K. Hydatid cyst of the pancreas: a case report and brief review. Turk J Gastroenterol. 2011 Aug;22(4):430-2.
3. Sorogy ME, El-Hemaly M, Aboelenen A. Pancreatic body hydatid cyst: A case report. Int J Surg Case Rep. 2015;6C:68-70.
4. Masoodi I, Nabi G, Kumar R, Lone MA, Khan BA, Naseer Al Sayari K. Hydatid cyst of the pancreas: a case report and brief review. Turk J Gastroenterol. 2011;22(4):430–2.
5. Babba H, Messedi A, Masmoudi S, et al. Diagnosis of human hydatidosis: comparison between imagery and six serologic techniques. Am J Trop Med Hyg. 1994;50:64-8.