Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Pediatric Surgery

Cystic Teratoma of the Pancreas: Case Report

Dr Zineb Oudrhiri[1*], Dr. Hajar Dardar[1], Professor Othmane Alaoui[2], Professor Mahmoudi Abdelhalim[2], Professor Khalid Khattala[2], professor Youssef Bouabdallah[2]

[1]Pediatric Surgery Department; CHU HASSAN II; Rte Sidi Harazem FEZ
[2]Associate Professor Pediatric Surgery Department; CHU HASSAN II; Rte Sidi Harazem FEZ Morocco

DOI: 10.36347/sjmcr.2024.v12i06.015 | **Received:** 08.04.2024 | **Accepted:** 13.05.2024 | **Published:** 06.06.2024

***Corresponding author:** Dr Zineb Oudrhiri
Pediatric Surgery Department; CHU HASSAN II; Rte Sidi Harazem FEZ

Abstract **Case Report**

Dermoid cysts of the pancreas, also known as cystic teratomas, are uncommon germ cell neoplasms that are typically benign and well-differentiated. Their rarity and lack of specific preoperative diagnostic tests make them challenging to diagnose before surgery. We describe the case of an 8-year-old girl who complained of abdominal pain and was found to have a cystic mass in the head of her pancreas on CT scan. The final diagnosis was confirmed as a dermoid cyst of the pancreas. Although these cysts are usually benign, complete surgical removal is often necessary.

Keyword: Pancreatic Cyst Teratoma Surgery Anapath.

INTRODUCTION

The cystic teratoma, also known as a dermoid cyst, is a neoplasm of germ cells. It commonly occurs in the ovaries, testicles, and bladder, but very rarely in the pancreas, this tumor often appears potentially malignant preoperatively, the final diagnosis is obtained after surgical removal. Histopathological examination alone is able to confirm the diagnosis.

CASE REPORT

This is an 8-year-old girl with no notable medical history, who presents with epigastric pain and vomiting dating back to approximately one month ago, which has been increasing over time. This is all occurring in a context of afebrile condition and preservation of general status. Her clinical examination did not reveal any palpable mass, and her laboratory tests, including complete blood count, infectious workup, and liver function tests, were unremarkable. Therefore, a decision was made to further investigate with a CT scan, which revealed a mass on the head of the pancreas, with a partially calcified wall and low-density mass with fat content, measuring 55 x 54 mm, it compresses the portal vein causing a serpiginous and dilated venous at the hepatic hilum (Figure 1)

Following the results of the CT scan, the decision to operate on the patient was made (figure 2)

The patient consented to an exploratory laparotomy for excision of the tumor. A midline incision was made, and no gross pathology was observed upon entering the abdominal cavity. The lesser sac was entered and the stomach retracted superiorly, displaying the pancreas, which had a palpable, white-tan mass on its head.

The bottom of the mass finds tufts of hair (figure 3), the operative consequences were marked by a frank jaundice and disturbance of the hepatic assessment, the control CT Scann shows the appearance of a dilation of the VBIH and VBP to 17 mm (figure 4), a BILI IRM shows a dilation of the VBIH and the VBP upstream of an extensive stenosis of the lower bile duct of iatrogenic appearance postoperatively.

An ERCP shows a distal stenosis of 10 mm with dilatation of the upstream BPV reaching 14 mm sphincterotomy made with plastic prothesis, abdominal ultrasound to control the prothesis in place (figure 5)

Currently, our patient is at 24 months postoperative and has no clinical or radiological complications, with a plastic prosthesis in place.

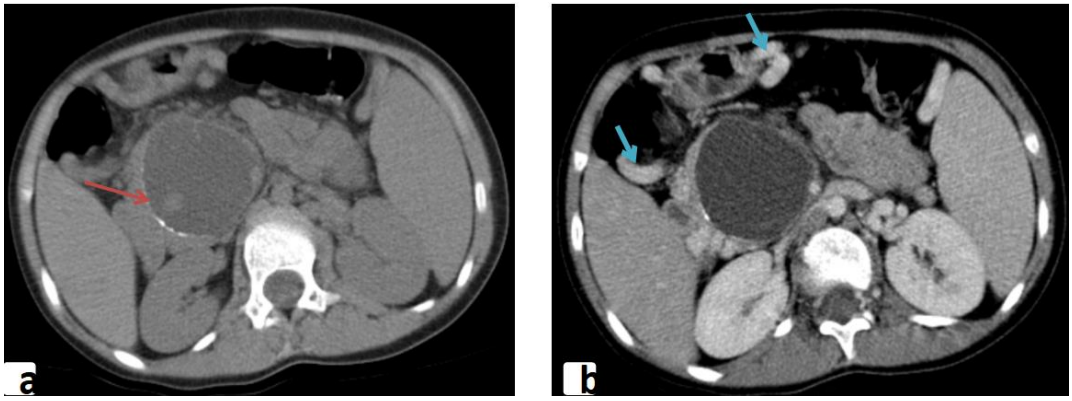

Figure 1: Abdominal CT scan; a) axial cut in spontaneous contrast, b) axial cut after injection of contrast product in the venous phase: which showed a mass on the head of the pancreas, with a partially calcified wall (red arrow) and low-density mass with fat content, measuring 55 x 54 mm, it compresses the portal vein causing a serpiginous and dilated venous at the hepatic hilum and peri garstric (bleue arrow)

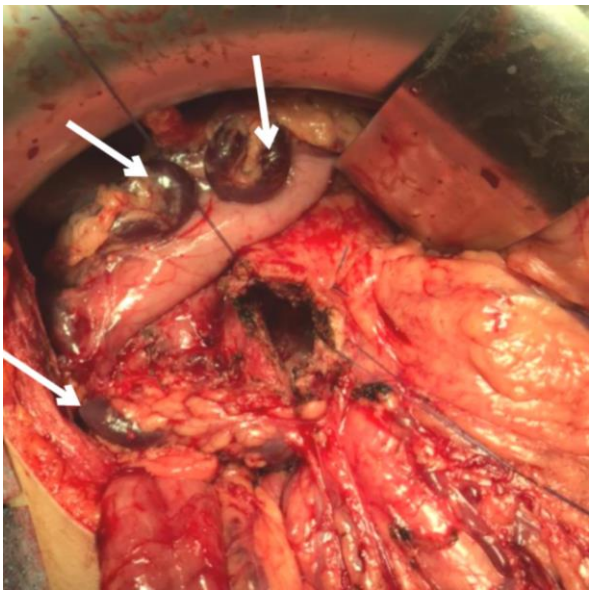

Figure 2: per operativ view of the tumor of the head of the pancreas shows that the cyst is filled with finely granular, grayish white, keratinaceous and sebaceous material. Dilated vein (white arrow).

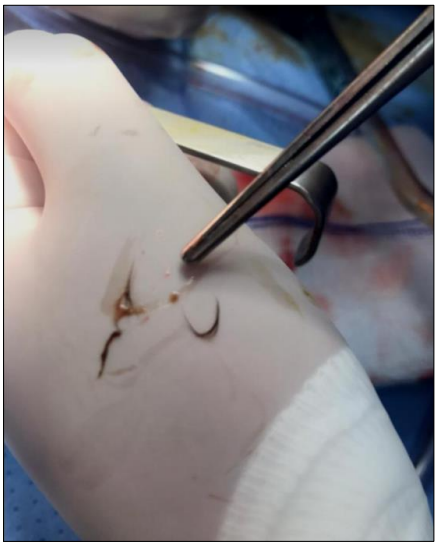

Figure 3: Macroscopic view of hair removed from the cystic teratoma of the pancreas

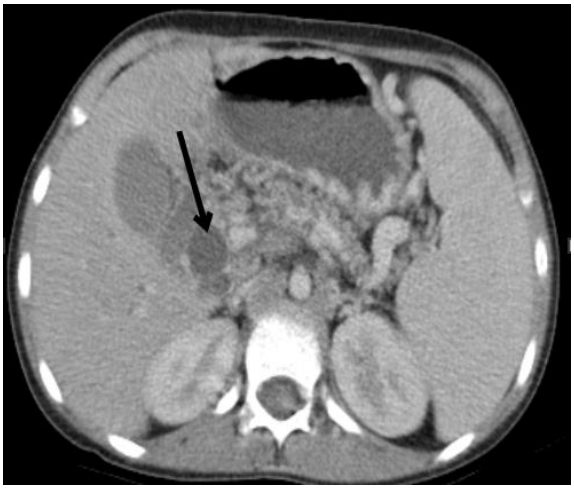

Figure 4: the control scanner shows the appearance of a dilation of the VBIH and VBP to 17 mm

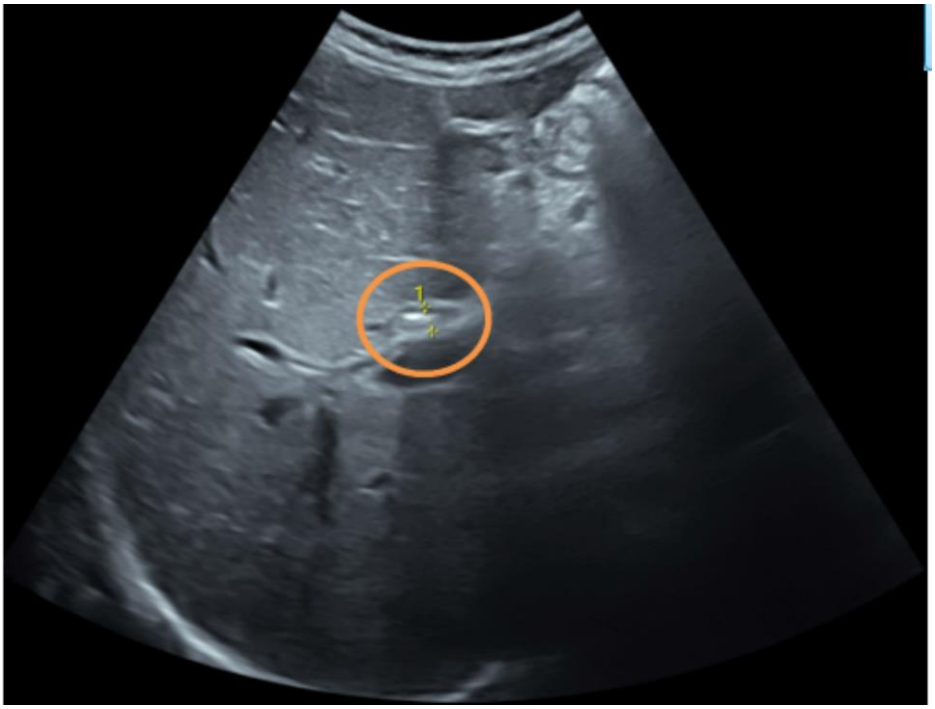

Figure 5: abdominal ultrasound to control the prosthesis in place (figure 5)

DISCUSSION

The cystic teratoma is a germ cell tumor derived from one of the three germ cell layers. It is commonly found in the ovary, testicles, retroperitoneum, bladder, and skull. The pancreas is extremely rare as a primary site [1]. Dermoid cysts usually occur in a younger age group, and in contrast with lymphoepitelial cysts, which are more common in men, there is no gender predominance [3]. Clinical presentation is nonspecific [2]. Complaints at presentation include abdominal pain, back pain, nausea and vomiting [4].

The traditional serum markers, such as CEA and CA19-9, would be expected to be significantly lower in dermoid cysts [4]. The combined use of ultrasound, CT, and MRI may help differentiate cystic lesions.

Total surgical excision is the preferred treatment method [3]. Surgical resection should always be considered the standard treatment to exclude malignant or borderline malignant neoplasms [4].

Although mature cystic teratomas of the pancreas are not malignant, total excision is the treatment because these lesions are true cysts containing secretory epithelium.

CONCLUSION

Despite the strictly benign nature of cystic teratoma, its resection is often necessary due to the difficulty of preoperative diagnosis.

Therefore, surgery remains the treatment for this rare pancreatic tumor to exclude malignancy, despite the difficulties encountered due to its complex location.

REFERENCES

1. Seki, M., Ninomiya, E., Aruga, A., Yamada, K., Koga, R., Saiura, A., ... & Kato, Y. (2005). Image-diagnostic features of mature cystic teratomas of the pancreas: report on two cases difficult to diagnose preoperatively. *Journal of Hepato-Biliary-Pancreatic Surgery*, *12*(4), 336-340.
2. Adsay, N. V., Hasteh, F., Cheng, J. D., & Klimstra, D. S. (2000, February). Squamous-lined cysts of the pancreas: lymphoepithelial cysts, dermoid cysts (teratomas), and accessory-splenic epidermoid cysts. In *Seminars in Diagnostic Pathology* (Vol. 17, No. 1, pp. 56-65).
3. Jacobs, J. E., & Dinsmore, B. J. (1993). Mature cystic teratoma of the pancreas: sonographic and CT findings. *AJR. American journal of roentgenology*, *160*(3), 523-524.
4. Seung, E., & Yoo Shin, C. (2015). Soon UkHong, Hyoung-ChulOh, Eun SunLee Dermoid cyst of the pancreas: *A rare cystic neoplasm Reports, 17*, 72-74.