

Isolated Pancreatic Tail Hydatid Cyst - Is Distal Pancreatectomy Always Required?

K Kaushik, P Garg, S Aggarwal, A Narang, S Verma, J Singh, V Singh Rathee, H Ranga, S Yadav

Citation

K Kaushik, P Garg, S Aggarwal, A Narang, S Verma, J Singh, V Singh Rathee, H Ranga, S Yadav. *Isolated Pancreatic Tail Hydatid Cyst - Is Distal Pancreatectomy Always Required?*. The Internet Journal of Gastroenterology. 2013 Volume 13 Number 1.

Abstract

Primary hydatid disease of the pancreas is a rare entity. We report an 18 year old female who presented with complaints of pain abdomen, vomiting and constipation for two months. Radiological investigations suggested it to be a case of hydatid cyst of the tail of the pancreas. Although distal pancreatectomy is treatment of choice but removal of the endocyst was done. Histopathology also confirmed the diagnosis.

INTRODUCTION

Hydatid disease is an important health problem in endemic areas specifically in persons dealing with stockbreeding.¹⁻³ It is caused by *Echinococcus granulosus*. It can involve any organ of the body, but liver and lungs being the most common. Other less commonly involved organs include bone, brain, kidney, spleen and orbit. Pancreatic involvement is rare. Here we present a rare case of isolated pancreatic involvement by hydatid disease. It was managed with endocyst removal and not distal pancreatectomy.

CASE REPORT

An 18-year-old female was admitted to the hospital with pain in the left upper abdomen for 2 months associated with constipation and loss of appetite. She had no history of stockbreeding. Clinical examination could not reveal any finding. Ultrasonography revealed a well-defined cystic lesion with membranes inside measuring 65 x 63 mm in size in relation pancreatic tail. CT scan also showed same finding (fig 1). Laparotomy was done with left subcostal incision. A cyst was identified and hydatid fluid aspirated followed by instillation of povidone-iodine as scolicidal agent (fig 2). The endocyst was removed and marsupialisation was done (fig 3). Histopathology confirmed it as hydatid cyst. The patient was given a course of albendazole. The patient was followed up ultrasonographically for 6 months, there was no evidence of any recurrence or any lesion in USG.

Figure 1

CECT showing hydatid cyst in relation with tail of pancreas



Figure 2

Intraoperative photo while aspirating hydatid fluid with surrounding povidone packs

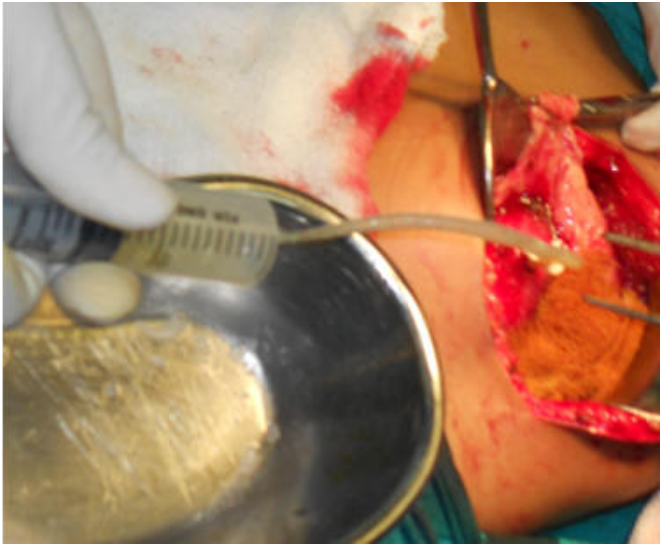


Figure 3

Excised endocyst in kidney tray



DISCUSSION

Isolated pancreatic involvement with hydatid cyst is very rare, the incidence being less than 1 percent as compared to other common sites of hydatid disease.^{4,5} It is caused by *Echinococcus granulosus*, a dimorphic parasite that exists exclusively as short flat worm (cestode) in the primary host (usually a dog) or as a cystic form in the intermediate host (usually sheep) while humans are accidental host.⁶ In most cases liver is first destination of intermediate host, or if embryo crosses the liver (portal system), the lung is next most frequently involved organ (next barrier to embryo).⁵ If

the embryo continues through the pulmonary capillary bed, the hydatid cyst may develop at any site in the body. Other less commonly involved organs include bone, brain, kidney, spleen and orbit. Isolated pancreatic hydatid disease is rare. But it should be kept as one of differential diagnosis of cystic lesions of pancreas. Clinical presentation varies according to anatomic location of cyst. Abdominal discomfort and vomiting are the main clinical presentation. Patients may present with obstructive jaundice, weight loss, an epigastric mass, and/or recurrent acute pancreatitis depending on anatomical location of cyst.^{7,8} Radiological evaluations may be helpful in its diagnosis due to close resemblance to other common cystic masses of pancreas. Although distal pancreatectomy is treatment of choice^{9,10} yet it can also be managed as in present case by excision of endocyst (total cystectomy), or by cystotomy and drainage in suitable cases. Thus a less extensive approach can prevent post-operative morbidity caused by surgery like distal pancreatectomy.

CONCLUSION

In cases where hydatid cyst is involving only tail of pancreas, it is not mandatory always to do radical procedure like distal pancreatectomy.

References

1. Yoganci K, Iret D, Sayek I. A case of primary hydatid disease of the pancreas simulating cystic neoplasm. *Pancreas*. 2000;21:104-5.
2. Oruç MT, Kulaçoğlu IH, Hatipoğlu S, Kulaş B, Özmen MM, Coskun F. Primary hydatid cyst of the pancreas related to main pancreatic duct. A case report. *Hepatogastroenterology*. 2002;49:383-4
3. Krige JE, Mirza K, Bornman PC, Beningfield SJ. Primary hydatid cysts of the pancreas. *S Afr J Surg*. 2005; 43:37-40.
4. Vargas RJ, Carrera AI, Esteve PV. Pancreatic hydatid cysts. *Cir Pediatr*. 1992 ;5:46-7.
5. Khiari A, Mzali R, Ouali M, Kharrat M, Kechaou MS, Beyrouiti MI. Hydatid cyst of the pancreas. Apropos of 7 cases. *Ann Gastroenterol Hepatol (Paris)*. 1994;30:87-91.
6. Hatipoğlu AR, Coskun I, Karakaya K, Ibis C. Retroperitoneal localization of hydatid cyst disease. *Hepatogastroenterology*. 2001 ;48:1037-9.
7. Safioleas MC, Moulakakis KG, Manti C, Kostakis A. Clinical considerations of primary hydatid disease of the pancreas. *Pancreatology*. 2005;5:457
8. Özmen MM, Moran M, Karakahya M, Coskun F. Recurrent acute pancreatitis due to a hydatid cyst of the pancreatic head: a case report and review of the literature. *J of Pancreas*. 2005 ;6:354-8.
9. Erkan N, Hacıyanlı M, Yildirim M, Yılmaz C. A case report of the unusual presence of hydatid disease in the pancreas and breast. *J Of Pancreas*. 2004;5:368.
10. Moosavi SR, Kermany HK. Epigastric mass due to a hydatid cyst of the pancreas. A case report and review of the literature. *J of Pancreas*. 2007;8:232-4.

Author Information

Kaviraj Kaushik, M.B.B.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India
kabirapgims@rediffmail.com

Pradeep Garg, M.S, D.N.B

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Sourabh Aggarwal, M.B.B.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Amit Narang, M.B.B.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Surender Verma, M.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Jaspreet Singh, M.B.B.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Vazir Singh Rathee, M.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Hansraj Ranga, M.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India

Sunil Yadav, M.B.B.S

Department of surgery, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences
Rohtak, Haryana, India