



Clinical Profile of Intraabdominal Cysts

KEYWORDS

intraabdominal cyst, pseudocyst, choledochal cyst

Dr Appasaheb Vasant Ingale

Associate Professor, Govt Medical College Miraj, Dist Sangli, Maharashtra

Dr Harshavardhan Tanvar

Senior Resident, Dept of Urology, K.E.M. Hospital, Mumbai

ABSTRACT

This study is of 61 cases who were diagnosed to have intra abdominal cysts of all age groups . Our aim is to study the incidence ,clinical presentation investigations available for diagnosis of intra abdominal cysts, and their management, Pancreatic pseudo cyst was the commonest cyst i.e 65.57%. Next was Chocholedochal cyst i.e 9.83%. Other cyst were omental cyst, mesenteric cyst, retroperitoneal cyst, renal cyst , hydatid cyst of liver , adrenal cyst, hepatic cyst, & splenic cyst. Males dominated i.e 67.21%. Most were common in age group of 31 to 40 yr and 41 to 50 yr with 26.22% incidence. The youngest case was of Choledochal cyst in a 17 day old male child. The Oldest case was of Choledochal cyst in a 61 yr old female.. One case was reported of Choledochal cyst with Situs Invertus. Ultrasonography of abdomen was the best and most commonly used diagnostic tool.

Introduction

Cystic swellings form the majority part of intra-abdominal pathology. Various cyst of abdomen include hepatic cysts, renal cyst, pancreatic cyst, omental & mesenteric cysts.^{1,2} Common causes may be congenital, parasitic, inflammatory and neoplastic diseases. For example, hydatid cyst infection is one of the oldest diseases known to man, and is also one of the most important global health problems.⁴ They may be asymptomatic as simple cyst or may present as acute life threatening catastrophe.⁶ Some cyst may undergo rupture, torsion, intracystic haemorrhage.^{11,14} With the advent of improved imaging technique such as Ultrasound, C T Scan, they have been increasingly recognized.⁷ In most of the cases surgery is the treatment of choice for symptom relief, medical line of treatment is less significant. The treatment depends on the cause of the cyst location and the organ involved.^{11,14}

PATIENT \ METHODS

This study comprises of 61 cases who were diagnosed to have intra abdominal cysts between June'09 to July'11 in Govt Medical College Miraj Hospital of all age groups and were studied prospectively to obtain the statistical data for comparison.

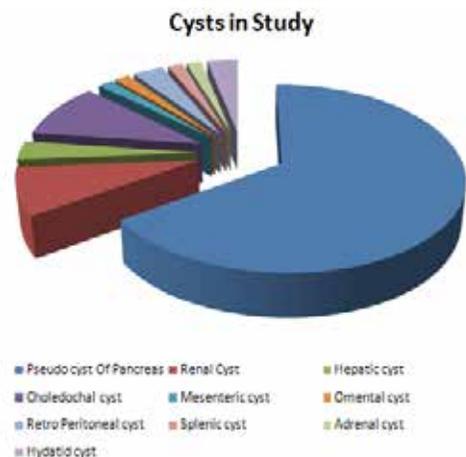
All the patients were initially examined in the outpatient department and were admitted. A detailed history comprising of age, sex, presenting symptoms of abdominal pain, vomiting, jaundice and fever were taken. A careful past history regarding abdominal operations, trauma, alcohol addiction, and jaundice were recorded. After general examination abdominal examination was done for tenderness, palpable Lump and related findings. All the findings were correlated and a provisional diagnosis was made. All the patients were investigated in details .CT scan MRI in few cases .A final diagnosis was made correlating the clinical features and investigations. Most of the patients were subjected to operative management. Some selected patients like Pseudocyst of Pancreas , Renal cyst were managed conservatively . Some patients with Pseudocyst of Pancreas , Hepatic cyst and Adrenal cyst were treated with Percutaneous drainage. Post operatively patients were followed up for

a period of 6 months and were looked for complications and recurrence.

Results

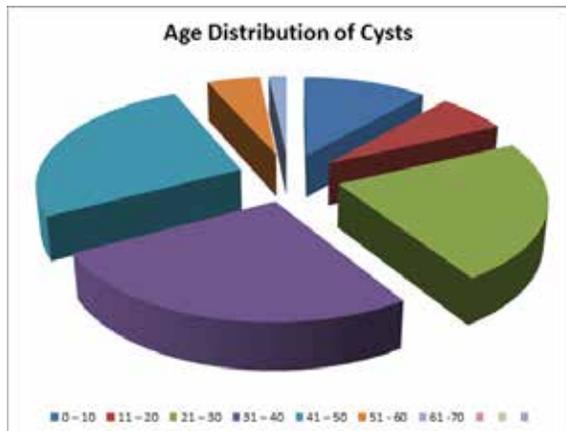
Out of 61 cases there were 40 cases of Pseudocyst of Pancreas (65.57%) , 5 cases of Renal cyst (8.19%), 2 cases of Hepatic cyst & Hydatid cyst & Retro Peritoneal cyst, respectively (3.27%), 6 cases of Choledochal cyst (9.83%), 1 case each of Mesenteric cyst, Omental cyst, Splenic cyst, Adrenal cyst (1.63%). Most common cyst in study was Pseudo cyst of Pancreas. Next was Choledochal Cyst (9.83%).

Figure NO 1



Most intra abdominal cyst were common in age group of 31 to 40 yr and 41 to 50 year (26.22%) Mean age of the present study was 32.80 years. Youngest was of Choledochal cyst in a 17 day male child. Oldest was of Choledochal cyst in a 61 year old female.

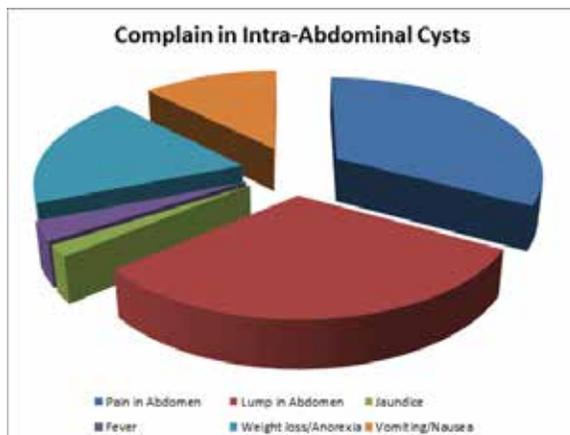
Figure NO 2



Present study was dominated by MALES(67.21%).. Females were 32.79%.

Most common presentation was Pain in Abdomen in 53 cases (86.88%). Next t was Lump in Abdomen with 50 cases(81.96%).

Figure No 3



There were total 40 patients of Pseudocyst of pancreas. common age group of presentation was 41yr-50yr. Outoff 40 patients 32 were male and 8 were female ,the most common etiologic factor was Alcoholin 26 patients .The next common was trauma in 8 patients Common presentation was abdominal pain(100%),followed by abdominal mass(90%),weight loss(55%) and vomiting(45%).,Common site of occurrence was the Lesser sac(60%),followed by body and tail(20%) and head (15%) ,Internal drainage was the most commonly performed procedure with 20 cases(50%) ,followed by conservative management in 16 cases (40%) . Among the 20 cases treated with Internal drainage ,14 (70%) patients underwent cystogastrostomy 4 patients (20%) with cystoduodenostomy and 2 cases (10%) cystojejunostomy.

The total number of patients of choledochal cyst in the study are 6 The age group 0-10year had 5 patients with youngest of 17 days old. The oldest patient in study was 61 year old .4 were female and 2 Male.In present study 4 patients underwent Total Cyst excision with Hepaticoduodenostomy 2 patients were subjected to Total Cyst excision with Roux-en-Y Hepaticojejunostomy of which one

patient had SITUS INVERTUS.In study a 7 yr old male patient was found to have TYPE 1 Choledochal cyst with SITUS INVERTUS and underwent Total Cyst excision with Roux-en-Y Hepaticojejunostomy .In the present study 2 patients were found to have retroperitoneal cyst and one each of omental and mesenteric cyst .The other intra abdominal cysts which were found and studied included Simple Hepatic cyst, Renal cyst, Splenic cyst, Adrenal Cyst, Hydatid cyst. In Present study Ultrasonography was carried out in all the patients (100%) which showed the location, extent and size of the cyst. Two patients (50%),one of omental cyst and other of Retroperitoneal cyst were further subjected to CT Scan Abdomen for detail evaluation of the extent of cyst. There were no postoperative complications such as wound gape, Septicemia, Intestinalobstruction, recurrence and death in the present study over a follow up period of 6 months.

DISCUSSION

In this study the most common age group for pseudocyst of pancreas was 41-50 years with a mean age of 35.25 years (range 15-60 years). According to W.Y.Yinet al⁸ mean age was 38.2 years (range 15-79.yrs). According to Wolf-gong et al⁹ mean age was 43.7years.On comparison there is no significant difference between this study and that of W.Y. Yin et al⁸ because same geographical distribution. Slightly higher mean age seen in the study of wolfgonget al⁹ because only pseudocysts following chronic pancreatitis were considered in their study.

In this study most common presentation was abdominal pain (100%) followed by lump (90%), weight loss (55%)and vomiting (45%).According to W.Y.Yin et al⁸ abdominal pain was the most common presentation (95.5%) followed by abdominal lump (81%).

According to Steven et al¹⁰,90% cases presented with pain followed by fever (60%) and mass per abdomen (70%).

The present study concurs well with other studies regarding most common presentation of pseudocysts of pancreas being abdominal pain followed by abdominal lump.

In this study the most commonly employed procedure was internal drainage in 50% cases, followed by conservative management in 40% cases .Percutaneous drainage was performed on 10%.

Among 20 cases treated by internal drainage,14 cases (70%) underwent Cystogastrostomy, 2 cases (10%) underwent Cystojejunostomy and 4 case (20%) underwent Cystoduodenostomy.

In our study there were 6 cases of Choledochal cyst 4(66%) were females & 2(34%) was male. The age of presentation varied from 17 days to 61 years. Chijiwa& Koga (1990)¹¹ have shown age of presentation from 2 months to 69 years in their series of 46 patients while Miyanoetal¹³ (1993) report a mean age of presentation as 4.3 years in their study of 180 patients.In study of Mukhopadyaet al¹² youngest patient was 3 months old. In present study youngest patient was 17 days old male.

The operative procedure carried out in 4 patients (66%) was total excision of the cyst with hepaticoduodenostomy and two patient(34%) , one with Situs Invertus and other the 17 day old male (the youngest patient of the study) were both subjected to total cyst excision with Roux- en- Y Hepaticojejunostomy.

Chijiwa & Koga (1990)¹¹ have reported satisfactory results with cyst excision and hepaticojunostomy as compared to cyst enterostomy whereas Todani et al (1994)^{14, 7} have favoured hepaticojunostomy.

In present study a case of Type 1 choledochal cyst with SITUS INVERTUS is reported in a 7 year old male child, who presented with lump in left hypochondriac region and jaundice and .The patient underwent Roux-en-Y Hepaticojunostomy and the follow up period was uneventful.

In our study there were 2 cases of Retroperitoneal cyst. One each of omental and mesenteric cyst. In Okhur H et al¹⁶ and Senocak ME et al¹⁷ study the most common cyst was Mesenteric cyst with 60% & 74% respectively. In Luo cc et al⁵ study Omental and Mesenteric cyst had equal incidence of 42%.

CONCLUSION

Alcohol may take you to the heavenly cave ,

But Pseudo cyst of Pancreas will lead you to Deadly Grave".

The abdomen is a Magic box or a Pandora's box.

One has to be very suspicious and vigilant when dealing with an abdominal cystic swelling as there might be surprises waiting inside.

The majority of cases in the present study were of Pseudo cyst of pancreas. Alcohol addiction and abuse is very common in India so is Pancreatitis associated with alcoholism.. Both USG & CT scan are good diagnostic modalities. Surgery is the main & the best line of treatment for pseudo cyst , but some cyst which are asymptomatic can still be managed conservatively. There is a wide age group of patients in which Choledochal cyst present. I cyst. Diagnostic modalities such as USG,CT scan ,MRI should be liberally used in diagnosis. Omental cyst, Mesenteric cyst & Retro peritoneal cyst are not so common. All of them are very notorious for their nonspecific presentation. A good clinical examination and a possibility of diagnosis of these cyst should be kept in mind. Many a times these cyst are non-malignant and asymptomatic..

REFERENCE

- 1) Dalley, Arthur F.; Moore, Keith L. (2006). Clinically oriented anatomy. Hagerstown, MD: Lippincott Williams & Wilkins. p. 237. ISBN 0-7817-3639-0. | 2) Kyung Won, PhD. Chung (2005). Gross Anatomy (Board Review). Hagerstown, MD: Lippincott Williams & Wilkins. p. 205. ISBN 0-7817-5309-0. | 3) Todani T, Watanabe Y, Narusue M, et al. Congenital bile duct cysts: Classification, operative procedures, and review of thirty-seven cases including cancer arising from choledochal cyst. Am J Surg. Aug 1977;134(2):263-9. [Medline]. | 4) Tappe, Dennis, August Stich, and Matthias Frosch. "Emergence of Polycystic Neotropical Echinococcosis." Emerging Infectious Disease 14.2 (2008): 292-97. Web. 21 February 2010. | 5) Todani T, Watanabe Y, Narusue M et al. Congenital bile duct cysts: Classification, operative procedures, and review of thirty-seven cases including cancer arising from choledochal cyst. Am J Surg 1977;134:263-269 [PubMed: 889044] | 6) Gunay, K, Taviloglu K, Berber E et al. Traumatic rupture of hydatid cysts: A 12-year experience from an endemic region. J Trauma 1999;46:164-167 | 7) Gharbi HA, Hassine W, Brauner MW et al. Ultrasound examination of hydatid liver. Radiology 1981;139:459 [PubMed: 7220891] | 8) W.Y.Yin ,Hwa-Tzongchan et al , The role of surgery in Pancreatic Pseudocyst,Tzu chi med J,2004;16:359-369. | 9) Wolfgang,Schtosser et al pseudocyst treatment in chronic pancreatitis, Dig Surg 2005;22:340-345. | 10) Steven T ,Edino et al ,experience with surgical internal drainage of pseudo cyst of pancreas DEC 2006,VOL.98 NO.12. | 11) The American Journal of Surgery ,Volume 165, Issue 2, February 1993, Pages 238-242. | 12) J Indian AssocPediatri Surg. 2011 Apr-Jun; 16(2): 54-57. doi: 10.4103/0971-9261.78131 | 13) Journal of Pediatric Surgery ,Volume 31, Issue 10, October 1996, Pages 1417-1421 | 14) The American Journal of Surgery ,Volume 140, Issue 5, November 1980, Pages 653-657. | 15) Intra-abdominal cystic lymphangiomas in infancy and childhood.Luo CC, Huang CS, Chao HC, Chu SM, Hsueh C. Chang Gung Med J. 2004 Jul;27(7):509-14. | 16) Mesenteric, omental, and retroperitoneal cysts in children.Okur H, Küçükaydin M, Ozokutan BH, Durak AC, Kazez A, Köse O.Eur J Surg. 1997 Sep;163(9):673-7. | 17) Mesenteric and omental cysts in children. Analysis of nineteen cases.Senocak ME, Gündo du H, Büyükpamukçu N, HiçsönmezA. SourceDepartment of Pediatric Surgery, Hacettepe University Faculty of Medicine, Ankara, Turkey. Turk J Pediatr. 1994 Oct-Dec;36(4):295-302. |