

Studying choledochal cysts about their appearance, investigations, therapy, and outcomes might enhance our understanding of the condition in our community [6]. We might also use it to compare the outcomes and potential issues of various surgical methods. This might aid in developing an effective management regimen for these individuals. The constraint was the limited sample size and brief follow-up period. This study offers preliminary insights on choledochal cyst illness in our environment.

Comment [A5]: Good that the authors have recognised the limitations of the study

Methodology

The study was a retrospective analysis done at the Department of Hepatobiliary Pancreatic Surgery at Sheikh Russel National Gastroenterology Institute and Hospital in Dhaka, Bangladesh. The study time frame spanned ~~Study time: 1 January 2022 to 1 January 2024.~~ Inclusion criteria included: Patients younger than 16 years old, those who did not have coexisting ~~don't have acute pancreatitis, or cholangitis or pulmonary disease, and those who have not undergone any major cardiac surgeries, don't have any major heart or lung problems were allowed to participate.~~ The medical and surgical records of the 36 patients were assessed. People who had surgery for choledochal cysts between January 2022 and January 2024 were used to gather this information. Radical cyst removal with Roux-en-Y hepaticojejunostomy or partial hepatectomy was the surgery that was done. After surgery, the patients were ~~watched~~ followed for 6 months. The data that was gathered included demographic information, clinical characteristics, diagnostic tests, surgeries and ~~postoperative complications~~ problems that happened after surgery, and ~~more tracking.~~ SPSS version 23 was used to ~~look at~~ assess the data. For numerical data, the mean and standard deviation were ~~shown~~ calculated. For categorical data, the frequency and ratios were used. A p value of less than 0.05 indicated statistical significance. Statistics said that something was important if the P value was less than 0.05.

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Comment [A6]: Inclusion and exclusion criteria for the study needs to be very clearly documented so there is no confusion

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Results

By looking at the information in the tables, we can see a number of important facts about how choledochal cysts are treated and how well they do at the Sheikh Russel National Gastroenterology Institute and Hospital in Mohakhali, Dhaka.

The patients' ages, genders, and other characteristics are shown in Table 1. Thirty of the patients (30 out of 36) had a radical cystectomy with Roux-en-Y hepaticojejunostomy. The other six patients had a partial hepatectomy. There was a slight bias toward guys in both treatment groups, but the number of women and men was about equal. People in the study were anywhere from 1 to 16 years old, with a mean age of about 9 years in both groups.

Table 1: Distribution of the patients according to demographic (N=36)

Variable	Radical Cystectomy with Roux-en-Y-Hepaticojejunostomy (N=30)	Partial Hepatectomy (N=6)	P-value
Gender	n (%)	n (%)	
Male	18 (60.0)	3 (50.0)	0.0194
Female	12 (40.0)	3 (50.0)	
Age group			
1-5 yrs	8 (26.7)	2 (33.3)	
6-10 yrs	9 (30.0)	1 (16.7)	0.0001
11-16 yrs	13 (43.3)	3 (50.0)	
Age yrs Mean ± S	9.58 ± 4.62	9.17 ± 5.19	0.0001

Comment [A7]: This is simply a summary table to introduce the statistical data giving the ages, means for each procedure. A p value is not calculated for this as we are not looking for statistical significance in this instance - as the table heading states it is purely to show distribution there is no comparison

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Comment [A8]: According to the way this is worded - it implies n = % which is not the case. N is a numerical value which is then subsequently depicted as a percentage

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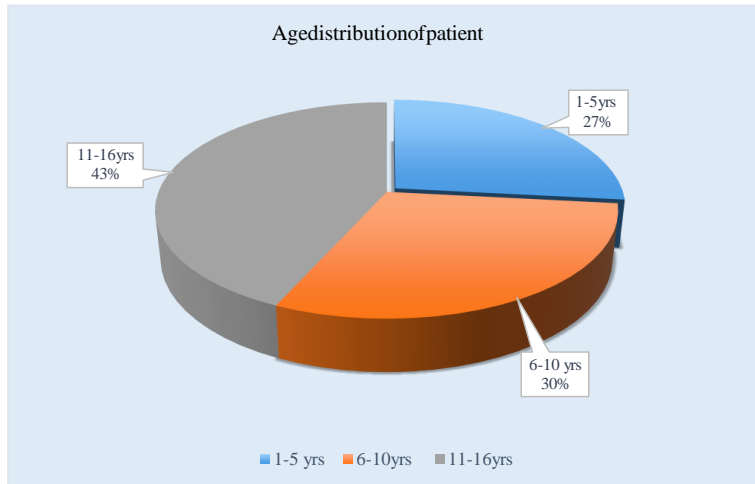


Figure I: Pie chart showed age wise patients distribution (N=36)

Comment [A9]: Needs rewording

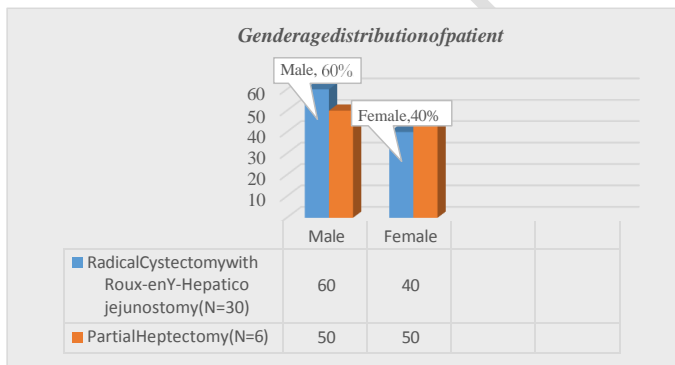


Figure II: Bar chart showed gender wise distribution (N=36)

Comment [A10]: This table is mislabeled on x and y axis - under male and female it does not indicate this is a percentage number - only in the white blurb box (which is not a formal axis delineation)

Table 2: Distribution of the patients according to different anomaly (N=36)

Variable	Radical Cystectomy with Roux-en Y-Hepatico jejunostomy (N=30)	Partial Hepectomy (N=6)	P value
Type	n (%)	n (%)	
I	25 (83.3)	0 (0.0)	0.0070
II	3 (10.0)	0 (0.0)	
III	0 (0.0)	0 (0.0)	
IV	2 (6.7)	0 (0.0)	
V	0 (0.0)	6 (100.0)	
Associated gallstone			
Yes	8 (26.7)	5 (83.3)	0.0001
No	22 (73.3)	1 (16.7)	

Comment [A11]: There is no mention as to how this diagnosis was made ? CT , US ? This is a radiological or intra operative diagnosis

Comment [A13]: Comment as above for P value this is not calculating statistical significance - please read up about where this is to be used appropriately to test a null hypothesis

Comment [A12]: Comment as above for n and %

APBDJ			
Yes	11 (36.7)	1 (16.7)	0.357
No	19 (63.3)	5 (83.3)	
Other anomaly			
Hydrocephalus	2 (6.7)	2 (33.3)	0.0001
No	28 (93.3)	4 (66.7)	
Associated portal hypertension			
Yes	8 (26.7)	3 (50.0)	0.0001
No	22 (73.3)	3 (50.0)	
Post-operative Hospital stay (Days) Mean ± SD	11.83 ± 2.10	10.17 ± 1.17	0.0001

Comment [A14]: Abbreviation not yet defined in text

Comment [A15]: What does this mean? Why is hydrocephalus relevant to HBP? And if so, why was a CTB then done for each patient?

Comment [A16]: How was portal HPT diagnosed? CT or US - there is no mention of the relevance of portal hypertension in the literature review relating to choledochal cysts and surgery

Comment [A17]: Table labelled incorrectly

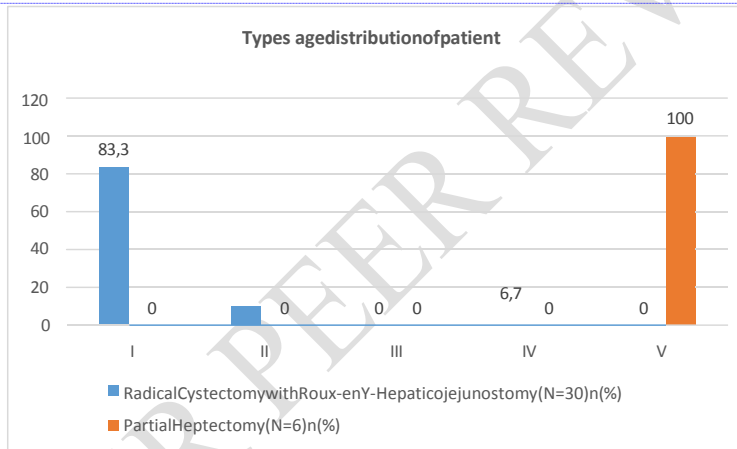


Figure III: column chart showed Types agedistributionofpatient (N=36)

The types of choledochal cysts, the diseases they can cause, and the length of hospital stay after surgery are all shown in Table 2. Notably, most of the patients who had radical cystectomy had Type I choledochal cysts (83.3%), while the patients who had partial hepatectomy had Type V (100%) cysts. Patients who were going to have a partial hepatectomy were more likely to have gallstones but an abnormal pancreaticobiliary duct junction (APBDJ) were less. The group that had the partial hepatectomy also had more cases of other problems that were linked to it, like hydrocephalus and portal hypertension. The average length of stay in the hospital after surgery was a little longer for the radical cystectomy group (11.83 ± 2.10 days) than for the partial hepatectomy group (10.17 ± 1.17 days).

Comment [A18]: Again, how was this dx made?

Comment [A19]: Abbreviation defined for the first time in text here, but it has been used twice already - please look at the journal specifications for abbreviations

Comment [A20]: Again, what is the relevance of intracranial hydrocephalus relating to choledochal cysts.

Again, how was the dx of portal hypertension dx and was this part of an inclusion or exclusion criteria?

Table3:DistributionofthepatientsaccordingClinicalfeatures(N=36)

Features	Radical Cystectomy with Roux-en Y-Hepatico jejunostomy(N=30)	Partial Hepatectomy (N=6)
	n (%)	n (%)
Pain	26(86.7)	2 (33.3)
Jaundice	25(83.3)	2 (33.3)
Abdominalmass	22(73.3)	3 (50.0)
Recurrentepisodesoffever	22(73.3)	4 (66.7)
PaleStool	5 (16.7)	2 (33.3)
Generalizeditching	3 (10.0)	1 (16.7)
Vomiting	8 (26.7)	2 (33.3)
Non-specific	5 (16.7)	1 (16.7)

The clinical features of the cases are shown in Table 3. In both groups, the most common first signs were pain, jaundice, an abdominal lump, and fever that came and went. But these signs happened more often in the group that had a radical cystectomy than in the group that had a partial hepatectomy. In Table 4, you can see a list of the problems that patients had after surgery. Postoperative complications were more common in the radical cystectomy group, with excess postoperative pain (56.7%), minor bile leakage (16.7%), and minor wound infection (10%) being the most frequent. In the partial hepatectomy group, excess postoperative pain (50%), postoperative bleeding (16.7%), and persistent vomiting (16.7%) were the most common complications.

Comment [A21]: Common first signs of post operative complications?

Comment [A22]: What is an abdominal lump? Is it implying a surgical site hernia?

Comment [A23]: Fever is by definition intermittent

Table4:DistributionofthepatientsaccordingPost-operativecomplications(N=36)

Complications	RadicalCystectomywith Roux-en Y-Hepatico jejunostomy (N=30)	Partial Hepatectomy(N=6)
	n (%)	n (%)
AcutePostoperativepain	17 (56.7)	3 (50.0)
Minorwoundinfection	3 (10.0)	1 (16.7)
Post-operativeBleeding	1 (3.3)	1 (16.7)
Minorbileleakage	5 (16.7)	1 (16.7)
Nil	1 (3.3)	0 (0.0)
Persistentvomiting	2 (6.7)	1 (16.7)

Comment [A24]: The table listing clinical features above are also post operative complications - why has this been separated?

Table5:Distributionofthepatientsaccording6months' follow-upcomplications(N=17)

Follow-upcomplications	RadicalCystectomywith Roux-en Y-Hepatico jejunostomy(N=13)	Partial Hepatectomy (N=4)	P value
	n (%)	n (%)	
Scarpain	1 (7.7)	2 (50.0)	0.379
Hypertrophicscar	4 (30.7)	1 (25.0)	
Abdominalmass	1 (7.7)	0 (0.0)	
Persistentfever	1 (7.7)	0 (0.0)	
Jaundice	1 (7.7)	0 (0.0)	
Ascites	1 (7.7)	0 (0.0)	
Hernia	1 (7.7)	0 (0.0)	
Uglyscar	3 (23.1)	1 (25.0)	

Comment [A25]: What is classified as an "ugly scar" how is this different from hypertrophic scar? This is not a standardised surgical term

Table 5 shows a summary of the problems that were seen in 17 of the 36 patients who were followed up after 6 months. The most common side effects in both treatment groups were problems with scars, like pain and scars getting bigger. The radical

cystectomy group had other problems, like an abdominal lump, fever that wouldn't go away, jaundice, ascites, and a hernia, but the partial hepatectomy group didn't.

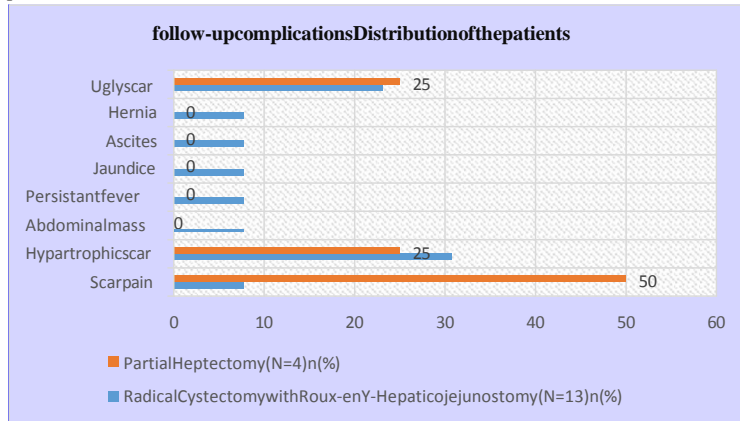


Figure: IV A Line chart showed Follow up complications wise distribution (N=36)

Discussion

The results of our study indicated a greater proportion of males in comparison to females, with a male-to-female ratio of 1.2:0.8, which aligns with findings from previous research conducted in India and Asia [7]. The mean age of onset in our study was 9.58 years, which was consistent with the results of earlier studies. The primary symptoms documented in the literature were abdominal pain, icterus, and a palpable mass in the abdomen. Radical cystectomy with Roux-en-Y hepaticojejunostomy or partial hepatectomy was chosen for surgery [7]. This is in line with what other studies have found to be usually good practice. The best way to treat choledochal cysts is to cut out the whole extrahepatic bile tree [8]. Either a major cystectomy or liver resection can be used to do this. It works best in the long run and makes it less likely that the cyst will turn into cancer. This study's choledochal cysts showed up with stomach pain, redness, a lump that could be felt in the stomach, and fever that came and went. This is similar to what other studies have found. The most common signs of choledochal cysts in kids were abdominal pain, jaundice, and a lump that could be felt in the belly [9]. The postoperative complications observed in this study, such as excess postoperative pain, minor bile leakage, wound infection, and postoperative bleeding, are commonly reported in the study. These are problems that have been studied before. After choledochal cyst removal, problems like bile leakage, wound infections, and collections in the belly happened quite often (about 20% of the time) [10]. This is similar to what other studies with skilled surgical teams have found: the results were mostly good. Similar problems with scars, an abdominal lump, fever that wouldn't go away, jaundice, ascites, and a hernia were seen in this study after 6 months. These problems have also been seen in other long-term follow-up studies. When a choledochal cyst was taken out, it could lead to long-term issues like cholelithiasis, pancreatitis, and bile strictures [11]. This could show up as fevers, redness, and a lump in the abdomen [12]. An incisional hernia was more likely to happen in people who had open surgery to remove a choledochal cyst [13]. This is like what was seen as a problem with following up in this study. Comparative studies have also shown how important it is to carefully check out the patient before surgery, make sure the surgery goes as planned, and be very careful during the surgery to get the best results and avoid problems. talked about how important it is to use imaging tests before surgery, such as magnetic resonance cholangiopancreatography (MRCP), to find out what kind of choledochal cystitis is and if there are any other issues [14]. This information can help the doctor plan the surgery and make it go better. Overall, the results of this study at the Sheikh Russel National Gastro Liver Institute and Hospital in Mohakhali, Dhaka, are mostly in line with what other research has said about how to treat choledochal cysts and how well they do. The study shows how important it is to do a thorough evaluation before surgery, plan the surgery correctly, and be very careful during the surgery. These are all very important for getting the best results and avoiding problems when managing this complicated disease.

Comment [A26]: Already delineated in table above - does not need repeating and discussed in text

Comment [A27]: This will depend on intra or extra hepatic or involvement of both

Comment [A28]: This is already discussed above in the types of procedures

Comment [A29]: Which literature documents this please?

Comment [A30]: We cannot use informal terms like this in a formal academic journal

Comment [A31]: This is repeated twice in the sentences above this

Comment [A32]: Bleeding where? Subcutaneously?

Comment [A33]: Again, formal English is needed in an academic setting

Comment [A34]: Results for what were mostly good?

Comment [A35]: Already mentioned 3 times above in consecutive sentences, excessive repetition

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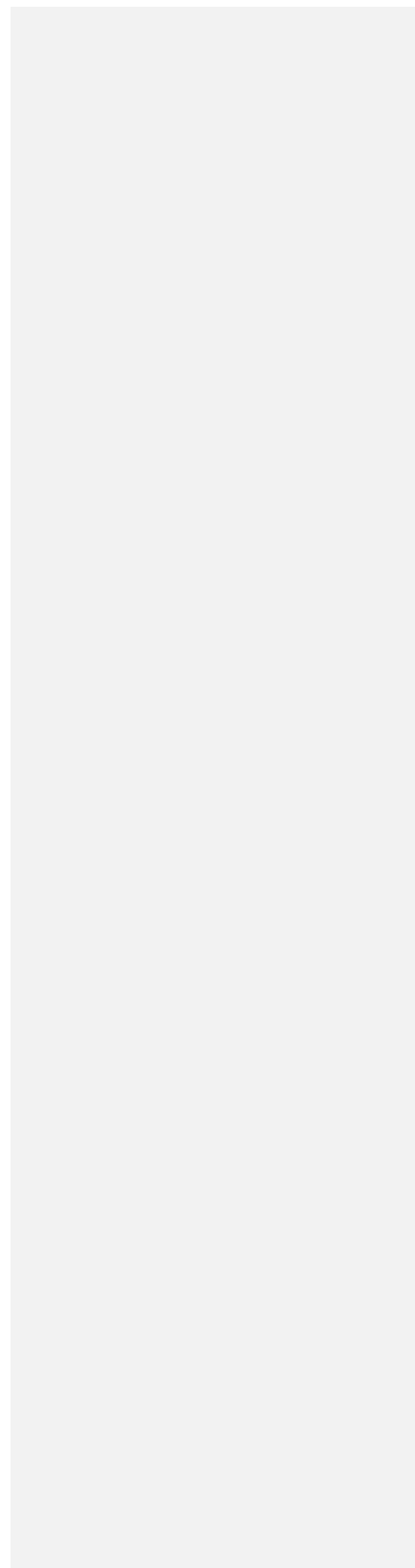
Comment [A36]: Again, not appropriate for an academic journal

Comment [A37]: This has not been discussed anywhere in the study of how a dx was made? CT, US, MRCP, ERCP?

Comment [A38]: The surgical component is not discussed no the aim of this study - why is this being mentioned but then not discussed if the author wishes to focus on this aspect?

Conclusion

UNDER PEER REVIEW



The Sheikh Russel National Gastro Liver Institute and Hospital in Mohakhali, Dhaka, sent us data that we used to learn a lot about how to treat choledochal cysts and how well they work. Whether a total cystectomy with Roux-en-Y hepaticojejunostomy or a partial hepatectomy is used for surgery depends on the type of choledochal cyst and any other conditions that are present. Complications after surgery were linked to both surgical methods. The most common problem was too much pain after surgery. Major problems did happen, but they were not very common. This suggests that the surgical methods used were generally safe and efficient. After 6 months, the follow-up data showed that both treatment groups had problems with their scars. However, only the radical cystectomy group had problems with an abdominal mass, prolonged fever, jaundice, ascites, and a hernia. Overall, the study shows how important it is to carefully evaluate the patient before surgery, plan the surgery correctly based on the type of choledochal cyst and any other conditions that may be present, and be very careful during surgery in order to get the best results and avoid problems when treating choledochal cysts.

Comment [A39]: How was this assessed? And what is too much pain?

Comment [A40]: This claim cannot be made as it is Multidisciplinary according to the level of expertise of the surgeon, anaesthetist etc

Comment [A41]: The conclusion is simply a repeat of the discussion - it need to show that this study was relevant and justified, not just rehash what has been said throughout the paper

Reference

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