

EVALUATE POSTOPERATIVE RESULTS ON LAPAROSCOPIC MANAGEMENT OF CHOLEDOCHAL CYSTS'S PATIENT AT DEPARTMENT ANAESTHESIA A OF HUE CENTRAL HOSPITAL

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ABSTRACT

Introduction: *Choledochal cyst is a congenital disease of the abnormal anatomy of inside and outside bile ducts in the liver. Laparoscopic treatment of choledochal cyst is the main treatment method. The quality of treatment depends on the follow-up care of patient after surgery.*

Materials and methods: *Retrospective study of 25 patients with choledochal cyst were treated by total laparoscopy from 2012 to 2015, then be followed-up care at the department of Anaesthetics A in Hue Central Hospital.*

Results: *In 25 patient, their ages ranged from 2.5 month to 60 years, 68% were female and 32% were male. 52% type IA, 36% type IC and 12% unknown type. After surgery, no patient had mechanical ventilation, 60% patients taking pain medication for 2 days, on average 4.3 days, 16% patients required a blood transfusion, 100% patients required nourished intravenously. Amylase, lipase and bilirubin had decreased markedly postoperation. There were no mortality patient and postoperation complications. On average, the postoperation period at department anesthetic A is 2.2 days.*

Conclusion: *The follow-up care of postoperation choledochal cyst patient by total laparoscopy is important, requires meticulous, combining clinical and subclinical monitoring.*

I. INTRODUCTION

Choledochal cyst is an abnormal congenital disease of internal and extra-hepatic biliary tract surgery, which is quite common in Asian countries, including Vietnam [5]. The disease is more common in women than men 3 to 4 times [6]. Diagnosing a choledochal cyst based on: clinical symptoms, percutaneous biliary cholangiography, Endoscopic ultrasound retrograde cholangiopancreatography, CT scan and Magnetic Resonance Cholangiopancreatography Scan [7]. Laparoscopic excision and re-establish intestinal-bile duct is ideal treatment. Mortality rates are few, but still have complications after surgery, such as bleeding, postoperative biliary leakage, gastrointestinal bleeding, acute pancreatitis

and pancreatic fistula, intestinal obstruction, etc. Such the result of treating choledochal cysts in addition to depending on surgeon's quality, postoperative care for early detection and restriction of complications also be an equally important part. The monitoring of postoperative care of choledochal cysts disease requires careful, meticulous and rigorous combination of clinical and subclinical monitoring to plan the best treatment strategy for patients. In parallel with that, the nurturing regime for patients must also be cared for a scientific and most reasonable way.

Therefore, we study the topic "Evaluate postoperative results on laparoscopic

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Received: 13/5/2019; Revised: 17/5/2019

Accepted: 14/6/2019

management of choledochal cysts's patient at department of anaesthetics a of Hue central Hospital" for the purpose of assessing care results from which to draw the experience in improving the quality of treatment for patients.

II. MATERIALS AND METHODS

25 patients was diagnosed choledochal cyts based on clinical and subclinical, indicated for surgery by laparoscopic excision and re-establish intestinal-bile duct in the form of Roux - en - Y. After that, be postoperative care in postoperative

room, department anaesthesia A of Hue Central Hospital.

All patients was determined age, sex, type of choledochal cyts, and attached deformities then evaluated the results of treatment based on:

- Number of days oxygenation, mechanical ventilation or not (days)
- Change in blood formula, other biochemical tests such as blood bilirubin, liver enzymes, pancreatic enzymes
- The need for postoperative blood transfusion as well as the method of nourishing patients.

III. RESULTS

3.1. Age group

Table 3.1. Distribution by age group

Age (years)	n	%
< 1	2	8.0
1- ≤ 5	12	48.0
5- ≤ 15	7	28.0
>15	4	16.0
Total	25	100
Min	2.5 month	
Max	60 years	

- The majority of patients are in the age group 1-≤5, accounting for 48.0%. The smallest age is 2.5 months, the largest is 60 years old.

2.2. Gender distribution

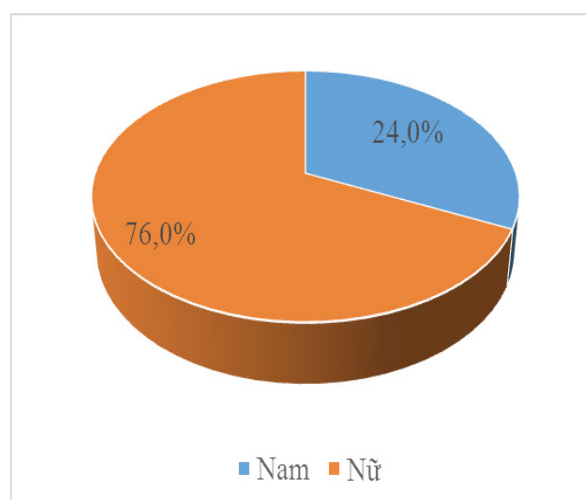


Chart 3.1. Gender distribution

In 25 patients with choledochal cysts, women accounted for 68.0% higher than men.

3.3. Type of choledocal cysts

Table 3.2. Type of choledocal cysts

Type	n	%
IA	13	52.0
IB	0	0
IC	9	36.0
II	0	0
III	0	0
IV	0	0
V	0	0
Not categorized	3	12.0
Total	25	100

Type IA have highest rate 52.0%.

3.4. Treatments and care in postoperative room

3.4.1. Extubation

Table 3.3. Extubation

Room	n	%
Postoperative	7	28.0
Operative	18	72.0
Total	25	100

After surgery, 72.0% of patients is extubated at the operating room and 28% at postoperative room and all of these patients were extubated before 24 hours. No case mechanical ventilation.

3.4.2. Analgesia

Table 3.4. Days using analgesia drugs

Day	n	%
1	6	24.0
2	11	44.0
3	4	16.0
>3	4	16.0
Average	4.3	

The majority of postoperative patients need to use pain relief for 2 days, accounting for 44.0%.

3.4.3. Blood transfusion

Table 2.5. Blood transfusion

Blood transfusion	n		%
Yes	1 time	2	8.0
	≥ 2 times	2	8.0
No		21	84.0
Total		25	100

There are 4 patients (16.0%) need blood transfusion after surgery and 84.0% of patients do not.

3.5. Nutrition

Table 3.6. Parenteral Nutrition

Days	n	%
1	3	12.0
2	7	28.0
3	5	20.0
>3	10	40.0
Total	25	100

After surgery, patients need Parenteral Nutrition more than 3 days, accounting for the highest rate of 40.0%.

3.6. Change of biochemistry before and after surgery

Table 3.7. Change of biochemistry before and after surgery

			Before	%	After	%
Bilirubin (mmol/l)	Total	0-40	21	84.0	23	92.0
		≥40	4	16.0	2	8.0
	Direct	0-8	21	84.0	21	84.0
		≥8	4	16.0	4	16.0
	Indirect	0-25	22	88.0	22	88.0
		≥25	3	12.0	3	12.0
Liver enzymes (U/L)	SGOT	0-80	20	80.0	22	88.0
		≥80	5	20.0	3	12.0
	SGPT	0-80	20	80.0	22	88.0
		≥80	5	20.0	3	12.0
Pancreatic enzymes (U/L)	Amylase	0-200	21	84.0	23	92.0
		≥200	4	16.0	2	8.0
	Lipase	0-120	19	76.0	22	88.0
		≥120	6	24.0	3	12.0
Prothrombin (%)		< 80	2	8.0	0	0
		≥80	23	92.0	25	100

After surgery, the concentration of bilirubin decreased, before surgery, there were 16.0% of patients had the bilirubin concentration ≥40 mmol/l, after surgery, it was reduced to 8.0%. Before surgery, 80% of patients had normal liver enzymes, 88.0% after surgery. After surgery, amylase and lipase decreased. 92% of patients had prothrombin ≥ 80% before surgery, 100% of patients had prothrombin ≥ 80% after surgery.

3.7. Results

Bảng 3.8 . Days at operative room

Days	n	%
1	2	8.0
2	16	64.0
3	7	28.0
Mean	2.2	

The majority of patients need postoperative care for 2 days (40.0%). No patients died at the department.

IV. DISCUSSION

The results of our study show that the rate of women / men is 3.2 /. Similar to some other authors: according Huynh Gioi and Nguyen Tan Cuong (2013) when studying the results of laparoscopic surgery for choledocal cysts in children based on the diagnosis of Magnetic Resonance Cholangiopancreatography Scan, rate of female / male is 3.6 / 1 [2] and according Truong Nguyen Uy Linh et al (2008) in children the rate is 3.68 / 1 [3].

In our study, 52% patients belong type IA , IC 36%, similarly, Nguyen Thanh Xuan, Pham Nhu Hiep et al.(2013) showed that type IA 40,74% and IC 51.85%. Thus, the results of our study are similar to some authors in hospitals and other provinces.

About postoperative care: there are no patients who must have mechanical ventilation, and 16% of patients need blood transfusion after surgery, our results are higher than that of Truong Nguyen Uy Linh, the rate of patients needing blood transfusion. surgery is 7.69%, after surgery ins't mentioned. Majority patients need to support 2 days pain relief and the patients receive laparoscopic excision of extrahepatic cyst(s) and re-established gastrointestinal circulation, so the average time for parenteral is 3 days maximum.

Time average of postoperative is 2 days (64% of

patients), no early complications after surgery. This shows a close and well monitoring.

To prevent early complications after surgery, we need many factors, the most important is the clinical monitoring of doctors in a coordinate with nursing, the level of surgeon and prognostic during operation. According Nguyen Tan Cuong [1], Huynh Gioi [2], Truong Nguyen Uy Linh [3], the rate of complications such as bleeding, postoperative biliary leakage, gastrointestinal bleeding, acute pancreatitis and pancreatic fistula, intestinal obstruction... have occurred but with a low rate. There are no deaths patient.

V. CONCLUSION

The majority of patients are in the age group 1-≤5, 48.0%. In which women 76.0% and men, 24.0%. The majority belong type IA : 52.0%.

There were 72.0% of patients be extubated at operative room, 28% at postoperative room and all of these patients were intubated before 24 hours.

Postoperative patients need to use pain relief for 2 days (44.0%), over 3 days (16.0%). 16.0% of patients need blood transfusion after surgery.

Bilirubin and pancreatic enzymes decrease after surger, prothrombin increase after surgery. Most patients need postoperative 2 days care.

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