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Nabila Arshad Dr. WMO at THQ hospital Chishtian, Pakistan nabilaarshad70@gmail.com

Afra Ashraf Dr., WMO at THQ hospital Chishtian, Pakistan afraashraf83@gmail.com

Muqadas Habib Dr. WMO at THQ hospital Chishtian, Pakistan muqadashabib3@gmail.com

FREQUENCY OF COMPLICATIONS RELATED TO LAPAROSCOPIC **CHOLECYSTECTOMY**

Abstract: Objective: To determine various complications during laparoscopic cholecystectomy.

Design and Duration: This is a cross sectional study started in February 2018 and completed after duration of 6 months in July.

Setting: This study was conducted in surgical unit of Lahore General Hospital.

Patients and Methods: Study was conducted on patients admitted in general surgical unit of study institution during study period due to gal, bladder stones, mass or calculus or acalculus cholecystitis and they were planned for cholecystectomy. All investigations of these cases were done from within the hospital laboratory. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendant of the hospital.

Results: There were 200 cases included in this study with 120 female cases and 80 male cases. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy. Out of 16 cases 4(25%) cases got CBD injury, 5(31.2%) were having gall, bladder adhesions, stones were present in 2(12.5%) cases and in 2(12.5%) cases peritonitis developed peritonitis due to bile spillage. Out of 200 cases, bleeding from liver bed occurred in 25(12.5%) cases, CBD injury happened in 2(1%) cases, gut injury in 3(1.5%) cases, spillage of stones in 5(2.5%) cases, post operative collection of bile in 9(4.5%) cases and retained stone in CBD was seen in 4(2%) cases.

Conclusion: Laparoscopic cholecystectomy is an advanced procedure with many benefits but carrying few serious complications as well requiring expertise to reduce morbidity and mortality.

Key words: Laparoscopy, Cholecystectomy, CBD injury, Peritonitis, Gall stones

Language: English

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Introduction

Cholelithiasis is a very common problem among the people of Pakistan. It is more common among females than male. It may be due to increased blood cholesterol and less physical activity in women of our country as they mostly remain at home most of the time. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendant of the hospital. Patients were selected according to a pre set criteria. Male cases are less frequent. Gall stones lead to cholecystitis and inflammation, gangrene and perforation of gall



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	JIF	= 1.500	SJIF (Morocc	co) = 5.667		

bladder. Abscess may be formed after perforation. Mass, stones and inflammation of gall bladder are indications of surgical removal of gall bladder either by open cholecystectomy or via laparoscopic cholecystectomy which is an advance modern procedure with few complications than open cholecystectmy. Expert doctors re required for laparoscopic procedure because it is a fine procedure and if not done properly may cause serious complications leading to laparotomy.

Patients and Methods

This is a cross sectional study conducted in a tertiary care hospital located in Lahore, a city of Pakistan. Study was completed in duration of 6 months Study was conducted on patients admitted in general surgical unit of study institution during study period due to gal, bladder stones, mass or calculus or acalculus cholecystitis and they were planned for cholecystectomy. All investigations of these cases were done from within the hospital laboratory. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendant of the hospital. Patients were selected according to a pre set criteria. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy.

Results

There were 200 cases included in this study with 120 female cases and 80 male cases. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy. Out of 16 cases 4(25%) cases got CBD injury, 5(31.2%) were having gall, bladder adhesions, stones were present in 2(12.5%) cases and in 2(12.5%) cases peritonitis developed peritonitis due to bile spillage. Out of 200 cases, bleeding from liver bed occurred in 25(12.5%) cases, CBD injury happened in 2(1%) cases, gut injury in 3(1.5%) cases, spillage of stones in 5(2.5%) cases, post operative collection of bile in 9(4.5%) cases.

Table 1.

Causes of conversion to open cholecystectomy	Number of patients (N)	%
CBD injury	4	25
Adhesions of gall bladder	5	31.2
Stones in CBD	2	12.5
Spillage of CBD stones	2	12.5
Gall bladder perforation	3	8
Total	16	100

Table 2.

Complications due to laparoscopic	Number of patients (N)	%		
cholecystectomy				
Liver bed bleeding	25	12.5		
CBD injury	2	1		
Omental bleeding	6	3		
Stones spillage	5	2.5		
Biliary collection after operation	9	4.5		
Cystic artery avulsion	5	2.5		
Retained CBD stones	4	2		
Gut injury	3	1.5		

Discussion

It may be due to increased blood cholesterol and less physical activity in women of our country as they mostly remain at home most of the time. Male cases are less frequent. Gall stones lead to cholecystitis and inflammation, gangrene and perforation of gall bladder. Abscess may be formed after perforation. Mass, stones and inflammation of gall bladder are indications of surgical removal of gall bladder either by open cholecystectomy or via laparoscopic cholecystectomy which is an advance modern procedure with few complications than open



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Conclusion

Cholecystectomy is a very common procedure practiced in general surgery wards. Laparoscopic cholecystectomy is an advanced procedure with many benefits but carrying few serious complications as well requiring expertise to reduce morbidity and mortality.

References:

- Wilson, R. G. (1999). The results of laparoscopic cholecystectomy. In: R.G. Wilson (Eds.). Practical Laparoscopic surgery. (pp. 208-230) IMC Ma-cintyre: Butterworth: Heine Mann.
- Royston, C. M., Lansdown, M. R., & Brough, W. A. (1994). Teaching Laparoscopic surgery: the need for guidelines. *BMJ*, 308, 1023-1025.
- Schauer, P. R., Page, C. P., Stewart, R. M., Schwesinger, W. H., & Sirinek, K. R. (1994). The effect of Laparoscopic Cholecystectomy on resident training. *Am Jr Surg*, 168, 566-70.
- Sinha, I., Smith, M. L., Safranek, P., Dehn, T., & Booth, M. (2007). Laparoscopic subtotal cholecystectomy without cystic duct ligation. *Br J Surg*, 94, 1527.
- 5. Madan, A. K., Aliabadi-Wahle, S., Tesi, D., Flint, L. M., & Steinberg, S. M. (2002). How early Laparoscopic treatment of acute cholecystitis. *Am J Surg*, *183*, 232-236.
- Wang, W. N., Melkonian, M. G., Marshall, R., & Haluck, R. S. (2001). Post-grad-uate year does not infl uence the operating time in Laparo-scopic Cholecystectomy. J Surg Res, 101 (1), 1-3.
- Babineau, T. J., et al. (2004). The "cost" of operative training for surgical residents. Arch Surg, 139(4), 366-369.
- 8. Bridges, M., & Diamond, D. L. (1999). The financial impact of teach-ing surgical residents in the operating room. *Am. J. Surg.*, *177*, 28.
- Bhopal, F. G., Khan, J. S., Yusuf, A., Iqbal, W., & Iqbal, M. (2007). surgical audit of Laparoscopic cholecystectomy. *J Surg*, 17-19, 13-19.

- Gondal, K. M., Akhtar, S., & Shah, T. A. (2002). Experience of Laparoscopic cholecystectomy at Mayo Hospital, Lahore. *Annals*, 8(3), 216-18.
- Ayerdi, J., Wiseman, J., Gupta, S. K., & Simon, S. C. (2001). Training back-ground as a factor in the conversion rate of laparoscopic cholecystectomy. *Am Surg*, 67(8), 780-785.
- Imhof, M., Zacheri, J., Rais, A., Lipovac, M., Jakesz, R., & Fuegger, R. (2002). Teaching laparoscopic cholecystectomy: do beginners adversely affect the outcome of the operation? *Eur J Surg*, 168(8-9), 470-474.
- Ferzli, G. S., Fiorillo, M. A., Hayek, N. E., & Sabido, F. (1997, June). Chief resident experience with laparoscopic cholecystectomy. J Laparoendosc Adv Surg Tech A, 7(3), 147-50.
- Crolla, R. M., van Ramshorst, B., & Janeson, A. (1997). Complication rate in laparoscopic cholecystectomy not different for residents in training and surgeons. *Ned Tijdschr Geneekd*, 141(14), 681-685.
- Shamiyeh, A., & Wayand, W. (2004). Laparoscopic cholecystectomy: early and late complications and their treatment. *Langenbacks Arch Surg*, 389 (3), 164-171.
- Singh, R., Kaushik, R., Sharma, R., & Attri, A. K. (2004). Non-biliary mishaps during Laparoscopic cholecystectomy. *Indian J Gastroenterol*, 23(2), 47-49.
- 17. Kum, C. K. (1996). Laparoscopic cholecystectomy for acute cholecysti-tis, is it really safe. *W J Surg*, *2*, 43-48.

