

COMBINED ABDOMINAL HYSTERECTOMY, CHOLECYSTECTOMY AND APPENDICECTOMY: A STUDY OF 25 CASES IN ABBOTTABAD

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Background: Gallstone disease is common in women. Many patients undergoing abdominal ultrasound for gynaecological diseases are found to have gallstones. This study was done to see the results of combined abdominal hysterectomy, mini-cholecystectomy and appendicectomy in a set up lacking facilities of laparoscopic surgery. **Methods:** This prospective study was conducted in Ayub Teaching Hospital, Iltaf Hospital and Shahina Jamil Trust Hospital of Abbottabad from August 1998 to July 2004. All patients undergoing combined abdominal hysterectomy and mini-cholecystectomy were exclusively studied with reference to following variables. Age, Weight, Parity, Co-morbid conditions, peri-operative and post-operative complications, blood transfusion, hospital stay and mean extra time for mini-cholecystectomy and appendicectomy after abdominal hysterectomy. **Results:** There were 25 patients in the study group. The ages ranged from 35-50 years. Mean weight was 65 Kg. There were no operative complications. Mild postoperative complications occurred in 7(28%) patients. Mean extra time for cholecystectomy was 25 minutes. Mean hospital stay was 9 days. **Conclusions:** In selected women, combined abdominal hysterectomy, cholecystectomy and appendicectomy is a safe, feasible and cost effective procedure.

Keywords: Abdominal hysterectomy, Appendicectomy, Cholecystectomy

INTRODUCTION

Hysterectomy is one of the most common operative procedures in women of reproductive age.¹ Gallstones are three times more common in women than men and cholecystectomy is the most common major operation worldwide.² The incidental finding of gallstones has increased considerably as so many patients undergo ultrasound imaging of abdomen for a variety of condition.³ The gynaecologists also encounter gallstones incidentally picked during ultrasound for gynecological pathologies. Consequently there is a parallel increase in surgical referral by the gynecologist for this condition. It has been shown that cholecystectomy for gallstones during laparotomy for unrelated condition may sometimes be appropriate because such patients are at greater risk of developing symptoms.² Many women undergoing gynaecological surgery ask for cholecystectomy to avoid future hospitalization and another operation. One appropriate approach could be to do combined hysterectomy and cholecystectomy in one sitting. All previous studies have shown that cholecystectomy and appendicectomy at the time of abdominal hysterectomy does not increase the length of hospital stay or post operative complications.⁴⁻⁶ Previous studies have also confirmed the safety of appendicectomy at the time of Caesarean Section and abdominal hysterectomy.^{7,8}

This study evaluates prospectively the results of abdominal hysterectomy combined with mini - cholecystectomy and appendicectomy operated

on and followed by the same team lacking facilities of laparoscopic surgery.

MATERIAL AND METHODS

Between June 2000 to July 2004 all women undergoing abdominal hysterectomy, cholecystectomy and appendicectomy in Ayub Teaching Hospital, Iltaf Medical Centre and Shaheena Jamil Trust Hospital in Abbottabad, Pakistan were analyzed prospectively. Patients with age > 60 years, weight > 70 Kg, associated cardiovascular or pulmonary illnesses, acute cholecystitis, mucocoele gallbladder and symptoms or investigations suggestive of common bile duct stones were excluded. All patients had preoperative diagnosis of gallstones made by ultrasonography. Written informed consent was obtained for combined procedures from the women. All patients received prophylactic antibiotics. Hysterectomy was done first making Pfannenstiel incision. Appendicectomy was done through the same incision. Mini-cholecystectomy was done making 5-cm subcostal incision. Common bile duct was not explored in any woman. 4 (16%) women also had bilateral salpingo-oophorectomy done. Drains were placed in the pelvis and hepato-renal pouch. All the patients were encouraged to be ambulatory soon after the operation.

Data recorded included age, parity, weight, presenting symptoms, associated illnesses, biliary symptoms, laboratory and radiological investigations, operative procedures, operative findings, intraoperative complications, the time taken for

cholecystectomy and appendicectomy after completion of hysterectomy, postoperative complications, length of hospital stay from the day of operation, mortality (death occurring during hospital stay) and pathological findings of uterus, gall bladder and appendix.

RESULTS

The ages of women ranged from 35-60 years. They had borne average 4.2 children. The weights ranged from 45-78 kg (mean 65 kg). The presenting symptoms are shown in table-1. 18(72%) women had a history of biliary symptoms like episodic upper abdominal pain and dyspepsia, while seven (28%) women had silent gallstones. All patients had ultrasonographically demonstrable gallstones.

There were no intraoperative complications. One (4%) woman was transfused blood during the operation. The hospital stay ranged from 8-13 days (mean 9 days). Mild complications occurred in seven (28%) women. Mild to moderate fever in two (8%) women, mild paralytic ileus two (8%) women, wound infection in one (4%) and urinary tract infection in two (8%) women. There were no deaths. The mean extra time taken after hysterectomy for completion of cholecystectomy and appendicectomy was 25 minutes (20-35 m). Histopathology of gall bladder specimen showed chronic cholecystitis in 18, acute inflammation in two and normal gallbladder in five specimens. Histopathology of appendix showed normal appendix in 22 and chronic inflammation in three specimens. Histopathology of uterine specimen showed Leiomyoma 14(56%), Adenomyosis 5(20%), Endometriosis 4(16%), Endometrial Hyperplasia 1(4%) and no pathology in 1(4%) patients (table-2).

Table-1: Presenting symptoms.

Symptoms	Number (%)
Irregular uterine bleeding	18 (72%)
Mass lower abdomen	12 (48%)
Abdominal pain	10 (40%)

Table-2: Histopathology of uterine specimens

Histopathology	Number (%)
Leiomyoma	14 (56%)
Adenomyosis	04 (16%)
Endometriosis	05 (20%)
Endometrial hyperplasia	01 (4%)
No pathology	01 (4%)

DISCUSSION

In an era when cost containment in surgery has become increasingly important, a new approach has been combined procedures in laparoscopic surgery as well as open general and gynaecological surgery.⁹⁻¹¹

The ability to perform effectively combined abdominal hysterectomy, mini-cholecystectomy and appendicectomy in selected patients with minimum complications has been established by this study. There is paucity of studies on this subject but all previous studies have shown that in selected patients this combined approach can be considered by both the gynaecologists and general surgeons. In a series of 21 patients by Murray et al, only one patient had minor morbidity.⁴ In a series of 46 patients by Stevens et al, 15 patients had minor complications while eleven patients required blood transfusion.⁶ Studies have also shown that cholecystectomy does not increase the morbidity and mortality rates of concomitant gastric, colonic, hepatic, pancreatic and urological surgeries.¹² Other studies have shown that cholecystectomy and hysterectomy can be safely and effectively combined with other intra-abdominal procedure.¹³ A number of studies have demonstrated that incidental appendicectomy at laparotomy is not associated with complications.^{14,15} However, careful selection of patients is important while performing simultaneous operations. A healthy, young patient with easy hysterectomy is a good candidate while an obese patient with co-morbid medical conditions and difficult hysterectomy would be better served by delayed cholecystectomy

Seven (28%) women in this study had silent stones. While there is general agreement that symptomatic stones should be treated by cholecystectomy, there is no consensus on management of silent stones. The development of symptoms in silent stones is 2% per year and morbidity and mortality is approximately equal to those with cholecystectomy.¹⁶ Acute cholecystitis is serious illness that can progress to perforation, pericholecystic abscess and fistula with an increased morbidity and mortality.^{17,18} Conservative treatment of cholecystitis fails for one in seven patients with a risk of further attacks while waiting for elective cholecystectomy.² So in patients with silent stones receiving general anesthesia for other reasons than gall bladder disease, cholecystectomy can be done to avoid complications. It eliminates the risks of future anesthesia also. The risks of combined surgery are that of longer anesthesia and operation time, complications of two incisions, increased blood loss and the presence of two visceral peritoneal defects.⁴ However in this study it was only twenty-five extra minutes for completion of cholecystectomy and appendicectomy. Mean time for mini-cholecystectomy in other studies from Pakistan is 28 minutes.¹⁹

The mean length of hospital stay was 9 days. The length of hospital stay after cholecystectomy or hysterectomy is the same because the women in our

set up prefer to be discharged after removal of sutures. Combined surgery is also a cost-effective method of treatment because it eliminates future hospitalization and its expenses. The pharmacy costs, theatre costs, anesthesia costs and investigations costs are lowered. Health care economic efficiency is important in Pakistan where patients are generally poor

CONCLUSION

In properly selected women, combined hysterectomy, cholecystectomy and appendicectomy are safe, feasible and cost-effective procedures and can be considered by both gynaecologist and general surgeon. However if hysterectomy is complicated, gall bladder can be left for removal later on.

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