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Research Article

**A DESCRIPTIVE RESEARCH ON EXCHANGE OF
EXPERIENCE FOR THE LAPAROSCOPIC GYNECOLOGICAL
SURGERIES REGARDING THEIR SYMPTOMS, ADOPTED
PROCEDURES AND ASSOCIATED COMPLICATIONS FOR
THE REDUCTION OF POST-OPERATIVE PAIN IN PATIENTS**¹Dr. Humna Saleem, ²Dr. Noreen Khalid, ³Dr. Arfa Nageen¹Govt General Hospital, Samna Abad²Govt General Hospital, Ghulam Muhammad Abad Faisalabad³WMO, Ittefaq Hospital, Lahore.**Abstract:**

Aims: The aim of our research was the experience sharing about the surgeries of gynecological laparoscopic nature in the Mayo Hospital, Lahore.

Methods: We held a descriptive research from Jan, 2015 to May, 2016 for the analysis of the patients who experienced gynecological laparoscopic surgeries for their indications, procedure types and complications.

Results: Our research sample was 217 patients; among them a number of the cases were in the age group of 26 – 30 years as 53 (24.4%). Ovarian Cyst cases were 111 (51.1%), ectopic pregnancy cases were 27 (12.44%). There were 8 cases treated through cholecystectomy surgeons and hysterectomy or ovarian cystectomy. Diagnostic laparoscopy cases were 32 (15%). Laparoscopic hysterectomy was carried out in 33 cases (16%). Laparotomy conversion was carried out in 8 cases (3%) and vascular injury was observed in only one case. Repeated and common post-operative complaint was pain in variable degrees, which was treated through oral and parenteral analgesics. The diet through oral way was started in 4th or 6th hour and after 24 hours movement was started. Hospital stay of two days was observed in 164 cases (75%) and above two days stay was observed in 53 cases (25%).

Conclusions: Post-operative pain can be reduced through laparoscopic surgery in the setting of our research. It also decreased the rate of morbidity after the operation and lessen the stay at the hospital with immediate and prompt recovery. However, adequate expert and skilled based training is mandatory for the successful and skilled laparoscopic surgeries.

Keywords: Cystectomy, Hysterectomy and Gynecological Laparoscopic Surgeries (GLS).

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INTRODUCTION:

Laparoscopy is considered as a revolutionary addition in the surgical operation of gynecology being less invasive and safe as well. The founder of this technique is a Swedish person named Jacobeus who performed it in 1910 [1]. It was accepted generously in the start but later things were not the same. The prime obstruction was the exercise and learning of the endoscopy surgeries curve. Crawling phase has been observed in the setting of an under developed countries such as Nepal, as expertise lack is evident. Tubal sterilization was the 1st ever laparoscopic gynecological surgery held in Nepali Hospital of maternity. According to Padhye, in the 1600 laparoscopic sterilization cases under the local anesthesia were observed so simple in technique, cheap and satisfactory. At first, gynecology used this method for the diagnosis purpose only but with the passage of time it was used for the problems and difficulties of gynecology. The aim of our research was the experience sharing about the surgeries of gynecological laparoscopic nature in the Mayo Hospital, Lahore.

METHODS:

We held a descriptive research from Jan, 2015 to May, 2016 for the analysis of the patients who experienced gynecological laparoscopic surgeries for their indications, procedure types and complications. Informed consent from patients and ethical permission from the hospital ethical review committee was taken before the commencement of research. Patients were also explained procedure type, procedure duration, intra-operative and post-operative difficulties, laparotomy need and post-operative hospital stay. All patients were carried out an evaluation before operation which included clinical examination, scan of the abdomen and pelvis, blood investigations and tumor markers determination. Admission was carried out of all elective cases who were required to underwent a pre-

operative bowel preparation. All the cases were also endotracheal intubation general anesthesia. Patients during procedure were place in the position of lithotomy Trendelenburg. The abdomen was opened through Hasson Cannula open method. An infra-umbilical or supra incision (1 cm) was treated & creation of pneumoperitoneum was carried out. Total laparoscopic hysterectomy (TLH) was carried out using standard method with the help of vault closure by vaginally or end suture. Ovarian cystectomy was carried out through ovarian cyst enucleating, aspirating or deroofting followed by oophorectomy or cyst wall removal as and when required. Regular post-operative healthcare was extended to all the cases parenteral antibiotics in the 1st twenty-four hours and then oral antibiotics were given for five consecutive days. Diagnostic laparoscopy patients and cystectomy patients were discharged from the hospital after the average hospital stay of twenty-four hours; whereas, TLH cases were treated in the hospital stay for seventy-two hours. One-week follow-up was also carried out in all the cases.

RESULTS:

Our research sample was 217 patients, among them a number of the cases were in the age group of 26 – 30 years as 53 (24.4%). Ovarian Cyst cases were 111 (51.1%), ectopic pregnancy cases were 27 (12.44%). Thirty-two cases were treated with diagnostic laparoscopy & 185 cases with operative laparoscopy. Infertility was the major indication in the twelve cases of diagnostic laparoscopy. Common surgery was observed as lap cystectomy as shown in Table – I. TLH most common indication was observed as dysfunctional uterine bleeding as reflected in Table – III. Various complications have been shown in Table-IV about the laparoscopic procedures. Ten cases were observed with the infection of port site, and 2 of them required re-suturing. Eight cases were carried out with a conversion to laparotomy.

Table – I. Types of laparoscopic procedures

| Types of procedures | Number | Percentage |
|--------------------------|--------|------------|
| Diagnostic Laparoscopy | 32 | 15 |
| Lap Oophorectomy | 10 | 5 |
| Lap Cystectomy | 97 | 46 |
| TLH | 33 | 16 |
| LAVH | 7 | 3 |
| Lap salpingectomy | 27 | 13 |
| Bilateral tubal ligation | 3 | 2 |

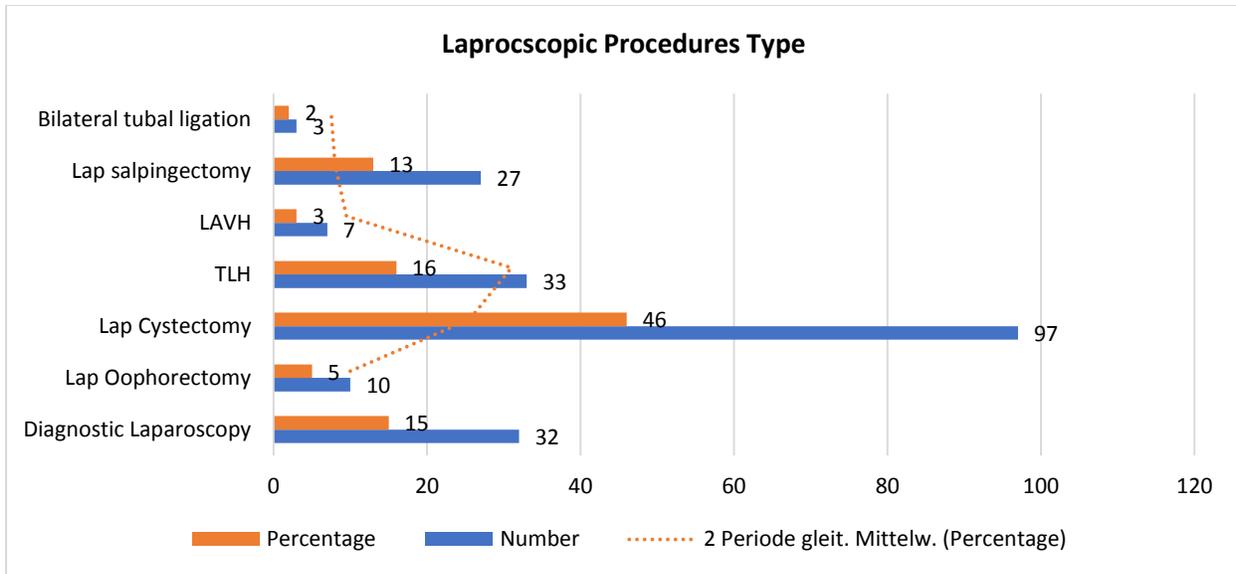


Table – II. Indications for diagnostic laparoscopy

| Details | Percentage |
|------------------------------|------------|
| Adenomyosis | 5 |
| Uterine Fibroid | 10 |
| DUB | 12 |
| Others (CIN, Chr cervicitis) | 6 |

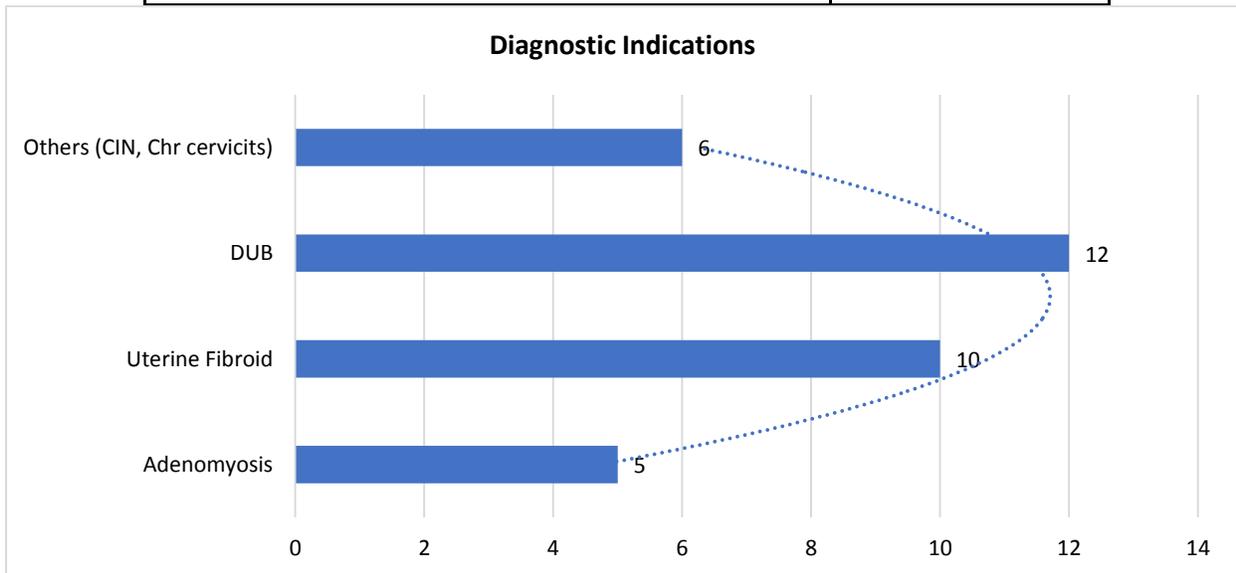


Table – III. Indications for total Laparoscopic Hysterectomy

| Details | Percentage |
|-------------------------------------|------------|
| Sub-fertility | 12 |
| PCOS | 3 |
| Endometriosis | 6 |
| Pelvic Pain | 4 |
| Others (Acute Abdomen, Cur Removal) | 7 |

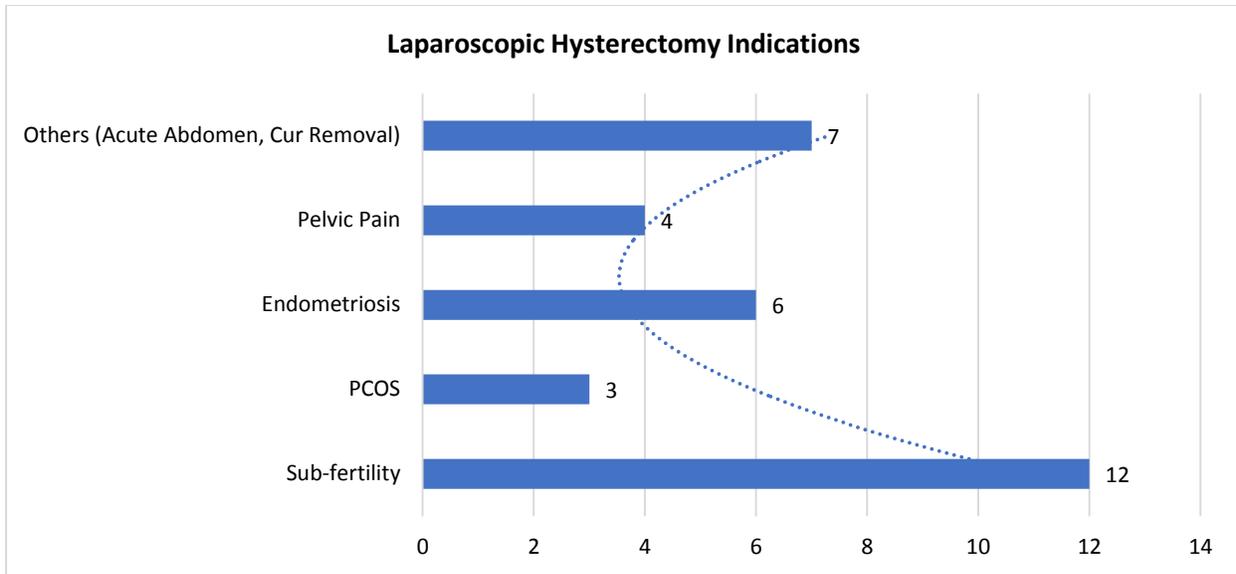
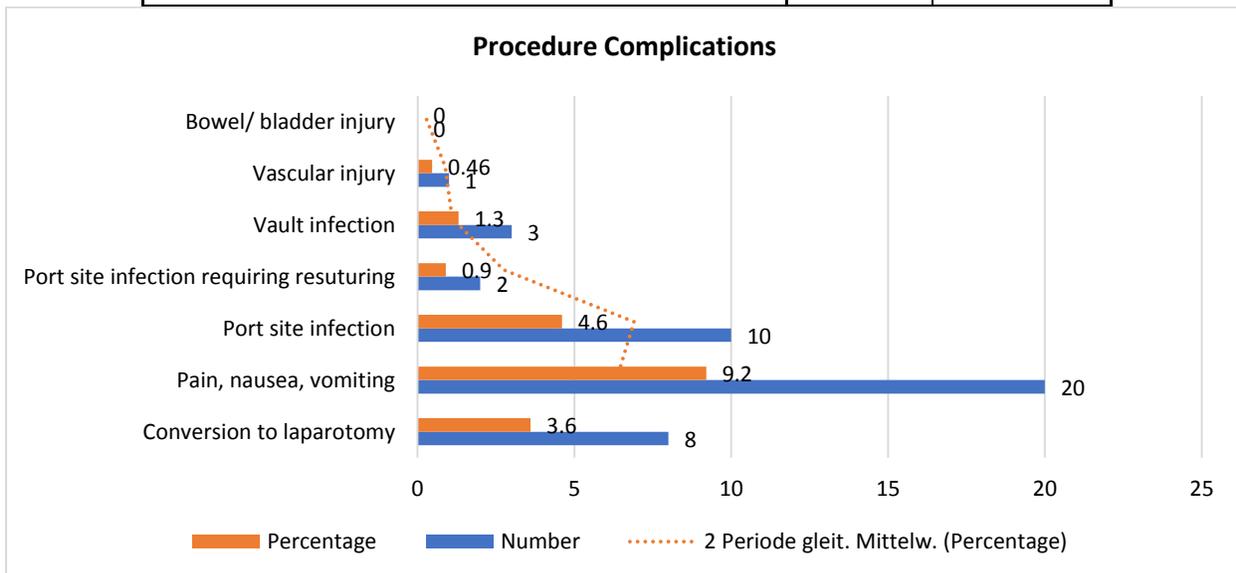


Table – IV. Complications of the procedure

| Complication Types | Number | Percentage |
|-------------------------------------------|--------|------------|
| Conversion to laparotomy | 8 | 3.6 |
| Pain, nausea, vomiting | 20 | 9.2 |
| Port site infection | 10 | 4.6 |
| Port site infection requiring re-suturing | 2 | 0.9 |
| Vault infection | 3 | 1.3 |
| Vascular injury | 1 | 0.46 |
| Bowel/ bladder injury | 0 | 0 |



DISCUSSION:

As all other beginners we also considered diagnostic procedures and studies laparoscopic operative procedures, we observed that in comparison to the diagnostic procedures the incidence was respectively 185 cases (85.2%) against 32 cases (14.7%) as shown in Table – I. Major indications included endometriosis and subfertility for the performance of diagnostic laparoscopy followed by an incidence of the chronic pain of pelvic. Few of the other research studies also take infertility as a vital sign and indication of diagnostic laparoscopy [3, 4]. In the cases of PCOD, drilling of the ovarian was carried out in the event if diagnostic laparoscopy.

Entry port were infra-umbilical and supra open method; whereas, the best of them is still is under debate [5]. Port site umbilical infection was the repeated observed complication in our research observed in 10 cases (4.6%) as shown in Table – II. In comparison to the Hasson research, 15,622 cases were observed in their research with an incidence of four percent [6]. Re-suturing was required in two cases. We observed single case of the vascular injury. Hemorrhage was a result of the right external iliac vein cauterization in the course of cyst enucleation, which demanded for the urgent laparotomy to control the bleeding. Patient was absolutely relaxing and fine after the transfusion of the one-pint blood after the operation. Same situation has been observed by Hemal and colleagues [7].

Our research observed 97 / 271 cases (46%) of benign ovarian masses that experienced a successful and satisfactory laparoscopic cystectomy as shown in Table -I. Conversion to laparotomy was required in three patients because of the vascular injuries and severe adhesions. Common most benign tumor of ovarian was (54.6%) cystadenoma, (25.7%) dermoid and (19.5%) endometriosis. Oophorectomy was carried out in ten cases. Which is in contrast with the outcomes of Shah [4]. Dermoid cysts and endometriosis were 2 repeated benign of ovarian tumors in the research of Yuen [8]. Similar results have been proposed by Parker with a success rate of 95.2% as 75.3% cases were laparoscopic cystectomy.

According to Yuen, Parker and Yuen conclude that for the benign adnexal masses the choice of treatment is to be operative laparoscopy [8, 9, 10]. Twenty-seven cases of ectopic pregnancies (13%) experienced laparoscopic salpingectomy. Hemoperitoneum evacuation was carried out in two cases to carry out the tubal abortion. Hemodynamically stable cases were treated with laparoscopic management and it was performed in the day that is also taken as the limitation of the

laparoscopic service in the time of an emergency. According to Olagendoye laparoscopic management and laparotomy was safe and feasible respectively in 62% & 31% of the cases after preliminary laparoscopy [11]. Few other authors also compared laparotomy and laparoscopic management for ectopic pregnancy favoring laparoscopic surgeries in the incidence of ectopic pregnancies [12].

Seven cases were treated with a success rate through laparoscopic assisted vaginal hysterectomy (LAVH) specially in the case of fibroid uterus in the early years. Later TLH became preferable and 33 cases (16%) were treated through this process, DUB cases were twelve, fibroid uterus in ten cases, adenomyosis in five and miscellaneous causes in six cases as shown in Table – I. Due to adhesions 4 cases were changed to TAH. A research held in 1994 states laparoscopic hysterectomy risk same for vaginal and abdominal hysterectomy through expert hands [13], which is same as observed by the Ribeiro, as he states comparable laparoscopic hysterectomy safety and abdominal hysterectomy [14]. We observed an average stay at hospital as one and a half day in the case of diagnostic laparoscopic surgeries, for cystectomy cases two days and for hysterectomy cases three and half day. In the beginner research studies two to six-day stay has been observed and reported [15, 16].

CONCLUSIONS:

Post-operative pain can be reduced through laparoscopic surgery in the setting of our research. It also decreased the rate of morbidity after the operation and lessen the stay at the hospital with immediate and prompt recovery. However, adequate expert and skilled based training is mandatory for the successful and skilled laparoscopic surgeries.

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