

# EVALUATION OF GYNAECOLOGICAL ENDOSCOPY DEPARTMENT PERFORMANCE AT ELSHATBY UNIVERSITY HOSPITAL FOR SAFETY CHECKLIST AND RATE OF COMPLICATIONS

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## INTRODUCTION

Minimal invasive surgery in gynecology (MIS) is the use of less invasive maneuvers, as laparoscopy or hysteroscopy, to surgically treat gynecological problems. Minimal invasive procedures provide more safe and more effective alternative to conventional laparotomy by avoiding larger abdominal incisions. With the use of MIS in gynecology, the patients may have: Small abdominal incisions, Less bleeding, Less postoperative pain, Short hospital stay, rapid recovery and return to work, decreased scar tissue, decreased risk of infection and many other complications. There are different types of MIS in gynecology which include: Laparoscopy, Vaginal approach, Laparoscopic-assisted vaginal approach, Robot-assisted laparoscopy, Single port surgery and Hysteroscopy. The primary objective of the WHO Surgical Safety Checklist is to support teams in ensuring that they consistently follow a few crucial safety protocols, thereby decreasing the most frequent and preventable complications compromising patients' lives and wellbeing.

## AIM OF THE WORK

The aim of this study was to prospectively evaluate the performance of gynaecological endoscopic department at Elshatby University Hospital from the first of March to the first of September 2022; total number of cases, type of procedures and complications.

## SUBJECTS AND METHODS

This prospective study was conductd on 717 women who were admitted to gynecological endoscopic department at Elshatby University Hospital from the first of April to the first of September2022.All these cases were subjected to the following: complete history taking, complete general examination, complete laboratory investigations, application of the WHO surgical safety checklist, intra and postoperative complications and postoperative observation for patient recovery and duration of hospital stay.

## RESULTS

From the total cases, patients who have undergone laparoscopic procedures were 360, while those who have undergone hystroscopic procedures were 357.

**Table 1:** Distribution of the studied cases according to different parameters in laparoscopy cases (n = 360)

|                                                 | No. | %    |
|-------------------------------------------------|-----|------|
| <b>Laparoscopy</b>                              | 360 | 50.2 |
| <b>Diagnostic</b>                               | 154 | 42.8 |
| <b>Combined Diagnostic for infertility</b>      | 95  | 61.7 |
| <b>DL (Chromo perturbation for infertility)</b> | 59  | 38.3 |
| <b>Operative</b>                                | 206 | 57.2 |
| <b>OL (Adhesiolysis)</b>                        | 53  | 25.7 |
| <b>Infertility</b>                              | 42  | 20.4 |
| <b>Pain</b>                                     | 11  | 5.3  |
| <b>OL (Cystectomy)</b>                          | 51  | 24.7 |
| <b>Pain</b>                                     | 45  | 21.8 |
| <b>Infertility</b>                              | 6   | 2.9  |
| <b>TLH</b>                                      | 14  | 6.8  |
| <b>OL (Myomectomy)</b>                          | 11  | 5.3  |
| <b>Infertility</b>                              | 5   | 2.4  |
| <b>AUB</b>                                      | 6   | 2.9  |
| <b>Salpingectomy for contraception</b>          | 4   | 1.9  |
| <b>Ectopic</b>                                  | 24  | 11.7 |
| <b>OL (Tubal Ligation)</b>                      | 23  | 11.2 |
| <b>Infertility</b>                              | 16  | 7.8  |
| <b>Contraception</b>                            | 7   | 3.4  |
| <b>Torsion</b>                                  | 9   | 4.4  |
| <b>Missed IUD</b>                               | 9   | 4.4  |
| <b>Drilling for PCO</b>                         | 5   | 2.4  |
| <b>Deep pelvic endometriosis</b>                | 3   | 1.5  |

**Table 2:** Distribution of the studied cases according to different parameters in hysteroscopy cases (n = 357)

|                                            | No. | %    |
|--------------------------------------------|-----|------|
| <b>Hysteroscopy</b>                        | 357 | 49.8 |
| <b>Diagnostic</b>                          | 131 | 36.7 |
| <b>Combined Diagnostic for infertility</b> | 95  | 72.5 |
| <b>DH (Cavity assessment infertility)</b>  | 36  | 27.5 |
| <b>Operative (OH)</b>                      | 226 | 63.3 |
| <b>Polypectomy</b>                         | 92  | 40.7 |
| <b>Infertility</b>                         | 82  | 36.3 |
| <b>AUB</b>                                 | 10  | 4.4  |
| <b>Septum for infertility</b>              | 37  | 16.4 |
| <b>Myomectomy</b>                          | 39  | 17.3 |
| <b>Infertility</b>                         | 35  | 15.5 |
| <b>AUB</b>                                 | 4   | 1.8  |
| <b>IUD Extraction</b>                      | 13  | 5.8  |
| <b>Biobsy</b>                              | 21  | 9.3  |
| <b>Niche</b>                               | 7   | 3.1  |
| <b>Asherman</b>                            | 7   | 3.1  |
| <b>Endometrial Ablation</b>                | 4   | 1.8  |
| <b>Transverse septum</b>                   | 3   | 1.3  |
| <b>Remnant Of Abortion</b>                 | 2   | 0.9  |
| <b>Hymenotomy</b>                          | 1   | 0.4  |

**Table 3:** Distribution of the studied cases according to complication in Lapaoscopic cases (n = 360)

| Complication                                                 | No. | %     |
|--------------------------------------------------------------|-----|-------|
| <b>Lapaoscopic (n = 360)</b>                                 | 7   | 1.9   |
| <b>Minor</b>                                                 | 3   | 0.8   |
| <b>Surgical emphysema</b>                                    | 3   | 0.8   |
| <b>Major</b>                                                 | 4   | 1.1   |
| <b>Conversion to laparotomy</b>                              | 1   | 0.278 |
| <b>Intra-abdominal hematoma evacuated by OL after 2 days</b> | 1   | 0.278 |
| <b>Ureteric injury</b>                                       | 1   | 0.278 |
| <b>Bladder injury</b>                                        | 1   | 0.278 |

**Table 4:** Distribution of the studied cases according to complication in Hystroscopic cases (n = 357)

| Complication                             | No. | %     |
|------------------------------------------|-----|-------|
| <b>Hystroscopic (n = 357)</b>            | 18  | 5.04  |
| <b>Intra operative complications</b>     | 10  | 2.8   |
| <b>Perforation by</b>                    | 8   | 2.2   |
| <b>Nalton catheter</b>                   | 1   | 0.28  |
| <b>Hegar</b>                             | 6   | 1.7   |
| <b>Hystroscope</b>                       | 1   | 0.28  |
| <b>Bleeding &amp; IU packing</b>         | 1   | 0.28  |
| <b>Bleeding &amp; IU catheterization</b> | 1   | 0.28  |
| <b>Postoperative</b>                     | 8   | 2.2   |
| <b>Intra-uterine adhesions</b>           | 7   | 1.961 |
| <b>Post-operative infection</b>          | 1   | 0.28  |

## CONCLUSION

Endoscopic surgery is now widely recognised as an efficient technique to manage gynecologic diseases and reproductive medicine by surgeons and patients. Although endoscopic surgeries are more safe, they have also some complications and limitations especially in less experienced hands and less equipped place. The shortage of equipment, lack of the number of interested experienced surgeons and the lack of proper training program inforced the unit to perform more simple procedures on low surgical risk patients to avoid the higher incidence of complications. This also revealed low performance of the department in management of advanced cases especially in gynaoncology and major gynaecological operations like TLH and laparoscopic myomectomy.