

Evaluation of Laparoscopic Role in the Diagnosis of the Gynecological Problem in Mosul City

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ABSTRACT

Aim: To identify the findings obtained by diagnostic laparoscopy in gynecological problems to evaluate the role of laparoscopy in the diagnosis of gynecological problems during the study period

Methodology: This is a retrospective study for cases of diagnostic laparoscopy that have been carried out in Mosul City's Hospitals (Governmental & Private). An information sheet was prepared to collect the relevant data related to present study objectives, which included, women age, parity, residency, infertility's type, indication for the laparoscopy. Data were recorded and entered into the Microsoft Excel file (2016). The results were presented as numbers and percentages.

Result: For the period between January 2018-December 2019 (279) women were had a laparoscopy. The primary infertility was diagnosed in (26.5%) of women and the secondary infertility was constituted (77.5%). Block right tube was seen in (3.7%) and the left tube was seen in (4.5%) and both tubes were found in (13.1%) of women. Regarding ovarian pathology, the result found that the poly ovarian cystic (POCs) were the most problem and constitute (36%) of the cases. Pelvic endometriosis, uterine fibrosis, and congenital abnormalities were seen in (1.3%) (3.9%) (4.2%) respectively.

Conclusion: Laparoscopy is a reliable procedure that improves diagnostic accuracy in pelvic disorders and can reveal information that may make laparotomy unnecessary.

Keywords: Laparoscope, gynecological, Mosul

INTRODUCTION

In the clinical field, diagnosis plays a vital role. It is the foundation for emerging a sufficient management strategy and creating non-compulsory clear treatment strategies¹. Precise finding decreases the threat to excessive treatments and improves the resources, mainly when they are restricted, transporting reimbursements throughout the therapeutic assistance process^{1,2}. In the arena of Gynecology, a perfect judgment and diagnosis is more critical due to an unlimited quantity of the symptoms and diseases that women may directly associate with other specialties. Therefore, wrong diagnosis can lead to the deterioration of a patient's situation, aggravating disease and producing more costs to the healthcare system^{3,4}. One of the best significant tools used over the years in the diagnosis and now the treatment of most gynecological problems is laparoscopy whose existence dates back to the turn of the 19th century when Kurt Semm initiated the concept of operative endoscopy⁵. In cases where diagnostic dilemma remains after clinical examinations and other investigation tools are used, and where there is contradiction between clinical findings and investigation results, laparoscopy is a very useful tool to reach a certain diagnosis

The current study was aimed at identifying the findings obtained by diagnostic laparoscopy in gynecological problems to re-assess the role of laparoscopy in the diagnosis of gynecological problems during the study period.

METHODS

This is a retrospective study for cases of diagnostic laparoscopy that have been carried out in Mosul City

Hospitals (Governmental & Private) during the period between January 2018 and December 2019. An information sheet was prepared to collect the relevant data related to present study objectives, which included women age, parity, residency, infertility's type, indication for the laparoscopy. Data were recorded and entered into Microsoft Excel file (2016). The results were presented as numbers and percentages.

RESULTS

For the period between January 2018-December, 2019 (297) women have had a laparoscopy. The indications for laparoscopy were infertility in (63%), chronic pelvic pain in (37%). Block right tube was seen in (3.7%) and the left tube was seen in (4.5%) and both tubes were found in (13.1%) of women. Regarding ovarian pathology, the result found that the poly ovarian cystic (POCs) were the most problem and constitute (3.4%) of the cases. Pelvic endometriosis, uterine fibrosis, and congenital abnormalities were seen in (1.3%) (3.9%) (4.2%) respectively.

Table 1: Findings of laparoscopy in the diagnosis of infertility

Indication of laparoscopy	%age
infertility	63
Chronic pain	37

Table 2: Laparoscopic general finding

General finding	%age
Normal	20.4
Abnormal	79.6

Table 3: Laparoscopic finding in Ovarian pathology:

Ovarian pathology	%age
Ovarian cysts	3.4
POCs	3.6
Sclerotic ovaries	3.9

Table 4: Laparoscopic finding in Tubal pathology:

Tubal pathology	%age
Blocked Right	3.7
Blocked left	4.5
Both	13.1

Table 5: Laparoscopic finding in periodontal pathology

Peritoneal pathology	%age
Pelvic adhesions	3.9
PID	1.7
Abdominal adhesions	37

Table 6: Laparoscopic finding in Uterine pathology

Uterine pathology	%age
Congenital abnormalities	1.3
Fibroid	3.9
Endometrioses	4.2

DISCUSSION

Over the past years, laparoscopy has become a powerful propaedeutic as well as a therapeutic tool of modern gynecological practice. It can reduce the number of inappropriate procedures and unnecessary treatments with very low complication rates. In conjunction with other propaedeutic procedures, laparoscopy may change the diagnostic conclusion in many gynecological cases with increased efficiency in the diagnosis of conditions undetected during previous clinical and ultrasound examinations⁶. In the present study, laparoscopy was done in 297(77.5%) of patients with primary infertility and 86 (26.5%) of women with secondary infertility. This is in contrast to findings reported from the Southeast, Nigeria, and India was primary infertility was the commonest indication for laparoscopy^{7,8}. But similar to that noted in the four studies conducted in Nigeria by Nasir et.al in 2014⁹, Yakasai et al.2012¹⁰, Agrawal et al 2018¹¹ and Muhammad et al.2018¹². Also, the study revealed that (20.4%) of the case had normal findings while others (79.6%) of women had abnormal findings(Table 2).Table 3 represents data concerning the ovarian pathology observed at laparoscopy. Polycystic ovaries observed in (36%) of cases, (3.9%) had sclerotic ovaries, and (3.4%) had an ovarian cyst. Most ovarian cysts are benign and are rarely associated with persistent pelvic ache. Although ovarian cysts, which include hemorrhagic cysts and follicular cysts, are frequently asymptomatic, whilst they purpose pain the pain is usually acute and resolves spontaneously inside one or cycles. Sometimes acute pain is so excessive that it requires immediate surgical intervention as within the case of ovarian torsion or intraperitoneal hemorrhage. The percentage of POCs was seen in the present study is higher than the one reported from south-east Nigeria¹³ and from Egypt where a rate of 25.1% was reported¹⁴. The data presented in (Table 4) concerning the tubal pathology diagnosed by laparoscopy. The study shows that (3.7%) of these patients there were right fimbrial block, (4.5%) of them there were left fimbrial block and bilateral fimbrial block were observed in (13.10%) of cases. This result is an agreement with the study of Tanaka et al¹⁵, that found more than half of the women had both tubes blocked¹⁶. This finding is in sharp contrast to an Indian study by Garima et al¹⁷ where the incidence was 23.26%,13 in the same line, a study in Nigeria indicated a bilateral tubal block in 20% of

the studied population.(18) Figure 5 showed that (37%) of cases had abnormal adhesion, (3.6%) of women had Pelvic adhesions while PID was seen in (1.7%) of studied cases. Argentino et al¹⁹ in their study reported that although no statistical difference was reached, laparoscopy increased in 76.7% the diagnosis of pelvic-abdominal adhesions, demonstrating that preoperative propaedeutic is still ineffective to establish the diagnosis of this condition. Adhesions are common etiologic factors for infertility, dyspareunia, intestinal obstruction, and chronic pelvic pain albeit their role in the physiopathology of pain remains unclear²⁰. Figure 6 shows that Uterine pathology was seen in the form of pelvic endometriosis, uterine fibroid, and congenital abnormalities (4.2%), (3.9%), and (1.3%) respectively. This is higher than the results given by Adelusi et al (1995)²¹, who reported, the presence of pelvic endometriosis in (1.9%) of patients, and slightly higher than the result given by Moon and Kim, (2000)²², who reported, the presence of pelvic endometriosis in (3.6%) and less than the results given by Peterson and Behrman (1990)(23); Templeton and Kerr (1997)(24) & Musich and Behrman (1992)²⁵.

CONCLUSION&RECOMMENDATION

Laparoscopy is a reliable procedure that improves diagnostic accuracy in pelvic disorders and can reveal information which may make laparotomy unnecessary.

Ethical consideration: Before data collection, official permission was obtained from the Ministry of Education/ Nineveh Directorate, and Written approval of participants was obtained before the start of data collection.

Conflicts of interest: Nil

Source funding: Self

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