

Role of laparoscopy in benign ovarian tumour

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Abstract

Background: Ovary is the commonest site of physiological and pathological lesions and are fourth most common indication for admissions. Benign ovarian tumour are 97 to 99% Over the last 10 years laparoscopy have become increasingly common approaches for the surgical removal of Benign Ovarian Tumours. **Aim:** To determine the benefits, harms and role of laparoscopy in Benign Ovarian tumour to estimate the operative time, blood loss, length of hospital stay. Recovery time, post operative pain in laparoscopy in Benign Ovarian tumours. **Methods:** This was an observational study conducted in the Department of Obstetrics and Gynecology, Government Medical College Akola over a period from March 2018 to March 2019 of 100 patients after obtaining ethical clearance. All the cases of Benign Ovarian tumour were included in the study. **Results:** Laparoscopic surgery for Benign Ovarian Tumour is on ethe most frequent laparoscopic surgical procedures (80-90%) performed presently^{3,5}. It is associated with fewer adverse events of surgery. It offers the advantage of decreased morbidity and improved post operative recovery³. 80-90% ovarian tumour occurred in 30-40 years of age. In last 1 year 100 laparoscopic cystectomy performed of which only (4%) were converted to lapratomy due to complications. Mean age was 30 to 40 yrs. Mean surgical duration was 39.25 min, Mean blood loss was 35.75ml. Major complication rate was (4%) of bowel injuries and haemorrhage. **Conclusion:** Benign Ovarian tumours are common 97 to 99% in all age groups. In women undergoing surgery laparoscopy for benign Ovarian tumours was associated with a reduction in fever, urinary tract infection. Post operative complication, post operative pain, hospital stay total surgical cost, recovery time and less adhesion formation².

Key Word: Benign Ovarian tumour, cyst, laparoscopy cystectomy.

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INTRODUCTION

The Ovary is a complex embryological historical and physiological structure that is capable of developing over 50 types of primary neoplasm variants^{1,2} Ovarian neoplasm is the common gynecological problems encountered by gynecologist in their daily practice. They can be seen in all age groups and can be physiological or pathological cysts. Approximately 80% of ovarian tumors can be successfully treated surgically using an endoscopic technique^{2,11,12,13,4} There are various types of

Benign ovarian tumours like follicular cyst, Mucinous cyst, corpus luteal cyst, Theca lutein and granulosa lutein cyst, polycystic ovarian syndrome and chocolate cyst.⁶ Many advantages of laparoscopic laparoscopic gynecologic surgery have been clearly demonstrated including shorter length of hospital stay, decreased post operative pain and recovery time and less adhesion formation and higher rate of patient satisfaction^{2,3,14} compared to laparotomy, laparoscopy is minimally invasive and can be performed through small incisions with better cosmetic results, less postoperative pain, no bowel manipulation and fewer adhesions to the abdominal scars. It allows early ambulation and return to normal activities and decreasing of the chance of deep vein thrombosis and pulmonary embolism^{3,4,6,10,15,16}. It is usually an outpatient procedure which lower the overall medical cost. It reduces the use of narcotics. It provides early Ambulation of patients and earlier return to full activity and work. Laparoscopic surgery sometimes provides a better view of the pelvic structures liver and diaphragm than via small laparotomy incisions^{11,12,13,14,15} Laparoscopy is a better choice than laparotomy for benign

ovarian cyst during pregnancy. It offer a faster recovery results in less pelvic adhesion less pain less blood loss and does not affect the fetus.

METHODS

This is an observational study carried out over one year period in a tertiary care institute. Study done on patients attending gynecology OPD at our institute during the period since March 2018 to March 2019. Patients are screened and investigated and operative procedure decided on the basis of indication. Data about pre-operative and intra operative findings of patients collected.

RESULT

In last one year at our training institute total 100 laproscopic cystectomy perfomed of which 4 were converted to lapratomy due to complication. It was observed that maximum number of cases were reported between the age group 30-40 yrs. While minimum above 40 yrs. Age wise distribution of patients.

Table 1:

Age group (years)	No. of patient	Percentage
(20 to 44)		
20 to 30	20	
30 to 40	70	
> 40 yrs.	10	

Mean of the above group data is 30 to 40 yrs. SD standard deviation of the above group data is

Table 2: Surgical Duration

Surgical Duration	No. Of Patients	Percentage
30 min	30	30%
30-60 min	60	60%
60-90 min	10	10%
> 90-120 min	No	0%
Total		100%

In present study out of 100 cases 30% cases had surgical duration upto 30 minutes, 60% cases had surgical duration between 30 to 60 minutes and 10% had surgical duration between 60 to 90 minutes. It was observed that maximum number of surgical duration were reported for duration 30 to 60 minutes with 60% while minimum number surgical duration 60 to 90 minutes with 10%. Mean of the above grouped data is 39.35. Standard deviation of the above grouped data is 18.25. surgical duration was calculated from surgical records cross verified with Anasesthesia records. Patients required prolong time due to anaesthesia complications or associated surgical producer were excluded.

Table 3: Intra Operative blood loss.

Amount of Blood loss in ml	No. Of Patients	Percentage
20-30 ml	50	50%
30-50 ml	30	30%
> 50 ml	20	20%
Blood transfusion required	NO	Nil
Total		100%

Blood loss was estimated from the changing vitals during intra operative period required cautery and post operative blood transfusion. 50% patients had 20 to 30 ml of blood loss. None of the patients required post operative blood transfusion. In present study out of 100 cases 50% had blood loss between 20 to 30 ml. 30% had blood loss between 30-50 ml. 20% had blood loss greater than 50ml. It was observed that maximum amount of patients had blood loss reported between 20 to 30 ml with 50% while minimum amount of patients had blood loss reported more than 50 ml is 20%. Mean of the above group data is 35.75. Standard deviation of the above group data is 12.00

Table 4: Distinguish of patients according to major intra operative complications

Complications	No. Of Patients	Percentage
Haemorrhage	2	2%
Bowel Injuries	2	2%
Urological Injuries	No	
Anaesthesia Complications	NO	
Total		4%

Table 5: Distribution of patients according to minor intra operative complications

Complications	No. Of Patients	%
Nausea	5	5%
Vomiting	2	2%
Chest discomfort	No	
Misplace Suture material	No	Nil
Wrong Passage of Veress needle and trocar	No	Nil

In present study out of 100 cases 2% cases had major intra operative complications like mild harmorrhage due to dense adhesions and large size cystadenomas. There was also evidence of minor Bowel injuries in 2% cases due to dense adhesions. No evidence of urological injuries no cases had Anaesthesia complications

DISCUSSION

This systematic review update has evaluated the benefits harms and costs laparoscopy for the treatment of benign ovarian tumours. The results of study shows that laparoscopic surgery was associated with significantly less post. Operative pain fewer adverse effects of surgery (surgical injurious or post operative complications) and shorter length of stay in hospital. In present study the major complication rate was 4%. Harmorrhage and minor bowel injuries occurred in study were recognized immediately and repaired.

CONCLUSION

The role of laparoscopy in Benign ovarian tumour appears safe and effective approach for variety of indications with minimal morbidity. Beneficial for all age group nulliparous, multiparous patients as well as obese patients. With the knowledge of all complications and its prevention maximum surgeons can give benefits of advantages of laparoscopy in Benign ovarian tumour to all women. More and more randomized clinical trials will motivate surgeons for this approach.

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