Undiagnosed Adnexal Masses: Can be Managed by Laparoscopy Assisted Colpotomy?

Hend S Saleh*, Azza A abd El Hameid, Hala E Mowafy and Walid A Abdelsalam

Department of Obstetrics and Gynecology, Faculty of Medicine Zagazig University, Egypt

Abstract

Laparoscopic procedures were moved ahead in management of gynecological problems. Improving the skill makes rate of complications of this procedure is low. Recently, it is believed the chosen practice for delighting adnexal Lesions. As Posterior colpotomy is applied only in laparoscopic hysterectomy. So, this study aimed to evaluate the safety and potential advantages of laparoscopy when assisted by colpotomy for organization of undiagnosed masses in adnexa through estimation of intraoperative events such as estimated blood loss, operative time and complications also postoperative pain and complications.

Patients and methods: Retrospective study on 200 patients underwent laparoscopy assisted by colpotomy for managing an adnexal mass. From December 2011 to November 2014. At laparoscopic unit of Zagazig University Hospitals. 190 cases completed procedure. Laparoscopy was renovate to open surgery because of practical complexities in inclusion in 6 case, in other 3 cases due to dense adhesions intra abdominally and one case as a result of bleeding which was so difficult to be managed securely by laparoscopy.

Results: Our study consisted of 200 women underwent laparoscopy due to adnexal mass which was diagnosed clinically benign and assisted by colpotomy for removal of adnexal mass. The average operative time was estimated statistically by the mean =75 minutes (SD ± 19), and the blood loss was estimated by median 40 mL (range 10-200). Pain scores on a 10 cm visual analgo scale showed estimated mean time of pain by hour is 1.4 hour (± 1.9), 1.6 hour (± 1.8) and 0.6 hour (± 1.3) for 1 hour, 3 hour assessment and 24 hours after incision closure. Histopathologically showed endometriosis was the most common as diagnosed in (35.7%), Dermoid in (27.3%), Cystoadenoma in (13.1%), Ovarian fibroma in (8.9%), Functional cysts in (6.8%), paraovarian in (3.1%), Malignant ovarian tumor in (2.6%) and Border cell tumor in (2.1%).

Conclusion: The advancement of laparoscopic procedure enhanced the management of most cases of the adnexal masses after careful evaluation assisted by colpotomy and so, offering the potential for safe, effective and minimally invasive initial surgical evaluation.

Keywords: Laparoscopy; Adnexal mass; Benign colpotomy; Minimally invasive

Introduction

In excess of the last years, laparoscopic skills proceeded in use of laparoscopy in gynaecologic field. Now, Laparoscopic route is coming close to treat adnexal lesions safely [1]. Masses of Adnexa are moderately common, cancer of ovary has unfoesed warning signs and is generally soundless in its premature periods. Currently, there is no dependable test for screening of cancer ovary, and there is bounded capability to identify it using existing diagnostic strategies [2,3].

A variety of researches have deal with the possibility of malignancy in masses of ovary. This ranges from 0.38% to 18.67% and is dependent on residents [4].

In 1990, some authors suggested scoring systems which have relayed ultrasound features, CA 125, history of family, and other changeable in expecting the possibility of malignancy [5]. At 2002, the American College of Obstetricians and Gynaecologists assessed the different predictors of malignancy of ovary and put referral criteria [6]. Surgical staging of ovarian tumor, histological subtype and grade of differentiation are very important factors for predicting the prognosis of tumor [7]. Early ovarian cancer was diagnosed in about 25% of patients. Five year survival of those patients is impending 90%. Microscopic metastasis presents in 20% of EOC on staging. So, careful staging is critical irrespective of the novel surgical alertness [8]. Laparoscopy was widely accepted as a standard diagnostic and therapeutic method for low risk adnexal masses. But, still using it in malignant masses is under trial [9].

Laparoscopy proffers several advantages over the conventional laparotomy approach including smaller size of incisions, enhanced visualization, decreased blood loss, and sooner recovery. Years ago, progress in laparoscopic practices have led to augmented apply of it in surgery of gynecological origin [4,5]. In recent times, technical information has sustained the perception that the laparoscopic advance for managing adnexal masses is now believed the favoured management [10]. The concern of the advancement laparoscopic managing of adnexal masses has relation to complexity of surgery attributable to individual required proficiency, anxiety about involuntary detection of malignancy and consequent upstaging and the elevated hazard of spillage [11,12]. A lot of procedures have been urbanized in the last years to reduce risk of spillage or unintended break. These techniques are embracing draw on endobags [13], and elimination throughout a culdotomy.

Recently, many researchers get no dissimilarity in death rates.
between patients undergoing a laparoscopy or laparotomy in females with obvious premature cancer ovary or borderline tumours [14]. Posterior colpotomy has been expressed as a way for sample rescue as early as 1896 when Howard Kelly accounted 10 cases of ectopic pregnancies controlled by the vaginal course. Colpotomy is achieved in favour of expanding an abdominal wound, as the vagina is recognized to be more distended than rectus fascia and permits in favour of a bigger opening with no contact on the possibility of postoperative complications such as ileus or abdominal wall hernia development [15]. Transvaginal elimination of samples through laparoscopic removal of adnexal masses is linked with less postoperative pain than transumbilical removal also; reduce the need for another incisions or amplification of the trocar incision [16]. Posterior colpotomy has been expansively certificated in the ancient times but has dropped out due to technical difficulties and its possible complications [17]. Recently this good-looking road has been re-established and successfully utilized to set free solid and semisolid masses next to operative laparoscopy and become a safe and easy to learn as long as surgical standards for example the use of preoperative prophylactic antibiotics and high-quality haemostasis. To stay away from spillage, which may happen with this procedure, an assisted laparoscopic- adaptation using an endoscopic bag has been expressed, this lets big solid samples to be eliminated safely and with minimal spillage [18].

This study aimed to evaluate the safety and potential advantages of laparoscopy when assisted by colpotomy for management of adnexal masses through estimation of intraoperative and postoperative outcomes.

Materials and Methods

This is a retrospective review of 200 women who attending the obstetrics and gynecology department in Zagazig University hospital from December 2011 to November 2014 and underwent laparoscopic management of an adnexa l mass. The protocol of our study was approved by the local ethical and research Committee of Zagazig University Hospitals. Patients either cropped up through the practice or were referral patients due to pelvic mass, pain, or as an accompanying diagnosis. All patients had Routine preoperative evaluation; included : full history taking, physical examination, Transvaginal ultrasound with Doppler studies, may computed tomography (CT), may magnetic resonance imaging (MRI) and The levels of tumor markers particularly CA 125 (normal range 0-35 mU/L).

Criteria of preoperative evaluation must be suggesting benign ovarian mass. SO, inclusion criteria were: No malignant ultrasonic imaging (MRI) and The levels of tumor markers particularly CA 125 (normal range 0-35 mU/L).

Criteria of preoperative evaluation must be suggesting benign ovarian mass. SO, inclusion criteria were: No malignant ultrasonic imaging (MRI) and The levels of tumor markers particularly CA 125 (normal range 0-35 mU/L).

Citation: Saleh HS, El Hameid AA, Mowafy HE, Abdelalamin WA (2016) Undiagnosed Adnexal Masses: Can be Managed by Laparoscopy Assisted Colpotomy? Gynecol Obstet (Sunnyvale) 6: 372. doi:10.4172/2161-0932.1000372
pathologically for conclusive confirmation. The mean time of postoperative pain was estimated by 10 cm visual analog scale (VAS) at 1, 3, and 24 h, with 0 score meant; no pain and 10 meant; the worst pain conceivable. All patients under went laparoscopy were monitored in hospital for the night and released on day 1 postoperative. Instructions were given to all patients like; stay away from sexual contact for 2 weeks next the process. Schedule for all patients was put appointment for follow-up at one, then 2 months following the operation to recognize any complication that may had happened later than discharge. Patient charts were done for demographic and clinical data. Information concerning to the surgery were as well collected including procedure of surgery, expected blood loss, time of operation incidence of spillage, intraoperative complications, postoperative pain, postoperative complications, and final pathologic reports. The data were investigated by Descriptive statistics. The t-test and the Mann-Whitney U test were performed to compare continuous parametric and nonparametric variables, respectively. Continuous variables outcomes were accounted as mean ± SD and range [11]. Fisher’s exact test was used to analyse proportions. Unqualified data were accounted as percentages of the total. Results were computed using statistical package for social sciences (SPSS) version 12.

Results

200 women were included in our study; underwent laparoscopy due to adnexal mass which was diagnosed clinically benign. Removal of mass was done with specimen retrieval through a posterior colpotomy incision. Laparoscopy was converted to laparotomy due to technical difficulties in inclusion of laparoscopy in 6 cases, in other 3 cases due to dense adhesions intra abdominally and one case due to bleeding that could not be managed securely by laparoscopy. The mean age of women was 39 years with SD 8.7 and range (20-69). Body mass index was represented by the mean 2.81 (SD 6.0 range 18.6-39.8). The range of gravidity was 0-6 and parity was 0-5 pre-operative. The size of adnexal specimen ranged from 5-13 cm (mean 10.2, SD 3.9) (Table 1). The mean operative time was 75 minutes (SD ± 19.3), and the median estimated blood loss was 40 mL (range 10-200) (Table 2). Two patients had Uneventful rupture of mass and managed thoroughly immediate suction irrigation by means of warm ringer's solution. Pain scores on a 10-cm visual analog scale Postoperative time, hour 1 hour 1.4 ±1.9 3 hour 1.6 ±1.8 24 hour 0.6 ±1.3

Data are stated as n (%)

Table 3: Intraoperative and postoperative complications.

<table>
<thead>
<tr>
<th>Intraoperative complications</th>
<th>Number of all cases (N) : 190</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uneventful rupture of mass</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Injury to bladder</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Injury to ureter</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Injury to bowel</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Injury to major vessels</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Postoperative complications</td>
<td>Deep vein thrombosis</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Pulmonary embolism</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Port site hernia</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Vaginal infection</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Re-operated later by Gyn Oncology</td>
<td>5</td>
</tr>
</tbody>
</table>

Data are stated as N and (%).

Table 4: Histopathological findings of adnexal mass.

<table>
<thead>
<tr>
<th>Histopathological findings</th>
<th>Number (N 190)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endometrioma</td>
<td>68</td>
<td>35.7</td>
</tr>
<tr>
<td>Dermoid</td>
<td>52</td>
<td>27.3</td>
</tr>
<tr>
<td>Cystoadenoma</td>
<td>25</td>
<td>13.1</td>
</tr>
<tr>
<td>Ovarian fibroma</td>
<td>17</td>
<td>8.9</td>
</tr>
<tr>
<td>Functional cysts</td>
<td>13</td>
<td>6.8</td>
</tr>
<tr>
<td>Paraovarian</td>
<td>6</td>
<td>3.1</td>
</tr>
<tr>
<td>Malignant ovarian tumor</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>Border cell tumor</td>
<td>4</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Data are stated as n (%)
incision, less postoperative ileus, decreased postoperative pain, and many advantages over mini-laparotomy not noticeable; abdominal extending incision of trocar.

laparoscopy after retrieving it and have numerous advantages over

About colpotomy, we used this technique in our study as we suspected were border line malignant among 200 cases after histopathology.

13 cm) 5 cases only were malignant (2.6%) and another 4 cases (2.1%) used preoperatively to distinguish benign from malignant masses.

2002 and 2006. No apparent report of criteria used to

In current study, mean preoperative mass size was range 10.5 cm (5-13 cm) 5 cases only were malignant (2.6%) and another 4 cases (2.1%) were border line malignant among 200 cases after histopathology.

Richard et al. preferred it and believe that is a perfect road to

There are some limitations of this study; one of them is the number of patients as we need to manage more cases. Also, postoperative follow up for long period of time.

Conclusion

Laparoscopic management of adnexal masses assisted with colpotomy for extraction of retrieved specimen after careful preoperative evaluation enhanced outcomes and seems realistic safe, and proffers better cosmetic results.
References


