International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Bhatnagar P et al. Int J Reprod Contracept Obstet Gynecol. 2013 Mar;2(1):12-15
www.ijrcog.org

pISSN 2320-1770 | eISSN 2320-1789

DOI: 10.5455/2320-1770.ijrcog20130202

Research Article

Delayed re-laparotomy after total hysterectomy

Paridhi Bhatnagar*, Erika Desai, Uday Patel, Bakul Leuva

Department of Obstetrics & Gynecology, SBKS Medical Institute and Research Centre, Pipariya, Waghodia, Vadodara, Gujarat, India

Received: 28 January 2013
Accepted: 30 January 2013

***Correspondence:**
Dr. Paridhi Bhatnagar
E-mail: drparidhibhatnagar1509@gmail.com

ABSTRACT

Background: Since beginning it's a dilemma whether to remove or preserve the ovaries. In the present study an attempt is made to understand this phenomenon and to have some direction for removal of ovaries. Preservation of the ovaries at the time of hysterectomy does not seem to compromise patient care. Impaired function or failure of the retained ovaries, however, is not uncommon; close post-treatment surveillance is therefore important in terms not only of recurrent disease but of function of the ovaries as well.
Methods: This study was done on 37 patients in duration of 3 years from June 2009 to May 2012. It is a retrospective statistical hospital based study of re-laparotomy done in post hysterectomised patients.
Results: The most common pathology in these patients was a simple ovarian cyst (45.95%), followed by endometriotic cyst (21.62%), mucinous adenoma (8.10%), serous cyst adenoma (5.40%), serous cyst adenocarcinoma (2.70%) and poorly differentiated adenocarcinoma (2.70%).
Conclusions: Emergence of pelvic mass after hysterectomy poses diagnostic and therapeutic challenge to gynecologists. In future, as the patients become more aware and the clinicians more enlightened on the long term benefits and risks of hormone replacement therapy, decisions might be easier for the patients and the clinicians alike.

Keywords: Adenocarcinoma, Relaparotomy, Hysterectomy

INTRODUCTION

Since beginning it's a dilemma whether to remove or preserve the ovaries. But when the patient comes back after some related symptoms it is a very difficult situation for the surgeon who has operated. In the United States, 78% of women 45 to 64 years old and 55% of women overall undergo bilateral oophorectomy at the time of hysterectomy.[1] These percentages mean that almost 300,000 women undergo bilateral oophorectomy each year.[1] Hysterectomy alone can sometimes lead to early ovarian failure, but this phenomenon is infrequent. A prospective study of pre- menopausal women found that, after 5 years of follow-up, 20% of women who underwent simple hysterectomy reached menopause, compared with 7% of matched women who did not undergo hysterectomy.[2] The symptoms for which the patient is likely to come back may vary from very minor pain in abdomen, urinary problem to large ovarian cysts and rarely symptoms of a malignant growth. In the present study an attempt is made to understand this phenomenon and to have some direction for removal of ovaries. Preservation of the ovaries at the time of hysterectomy does not seem to compromise patient care. Impaired function or failure of the retained ovaries, however, is not uncommon; close post-treatment surveillance is therefore important in terms not only of recurrent disease but of function of the ovaries as well.

Aims of the study

1. To know the incidence of relaparotomy for ovarian mass in post- hysterectomy patients.
2. To study the indications of relaparotomy
3. To study the time interval between hysterectomy and relaparotomy

METHODS

This is a retrospective, statistical, hospital based study of re-laparotomy done in post hysterectomised patients who came to Dhiraj General Hospital in the Department of Obstetrics and Gynecology.

The study was done on 37 patients in duration of 3 years from June 2009 to May 2012.

Inclusion criteria: (i) Age >35 years at the time of hysterectomy, (ii) Total abdominal hysterectomy done for benign diseases and either one or both ovaries are left behind, (iii) Relaparotomy done in patients with clinical diagnosis of adnexal mass.

The study comprises of 37 patients who underwent laparotomy for adnexal mass 1-9 years following hysterectomy. After confirming the diagnosis, ovaries were removed and sent for histopathological examination.

RESULTS

The age at hysterectomy is shown in table 1. It was observed that in most of the patients the time interval between hysterectomy and laparotomy was 1-6 years (Table 2). Another interesting observation that we made was regarding the reason for symptoms in comparison with time interval.

Table 1: Age at hysterectomy.

Age of the patient	No of cases	Percentage (%)
<40 years	17	45.95
40-45 years	18	48.65
>45 years	02	5.41

Table 2: Interval between hysterectomy and laparotomy.

Time interval	No. of cases	Percentage (%)
1-3 years	17	45.95
3-6 years	16	43.24
6-9 years	04	10.81

All the 3 patients with intra peritoneal adhesions had the time interval of hysterectomy between 1-3 years. In patients with time interval of 3-6 years, 64% had bilateral ovarian mass whereas in patients with time interval of 6-9 years, 71.20% had unilateral ovarian mass (Table 3). Amongst these, 21 (56.76%) women underwent total abdominal hysterectomy, 7(18.92%) women underwent total abdominal hysterectomy with unilateral salpingo-oophorectomy whereas 9 (24.32%) were operated vaginally as shown in the table 4.

Table 3: Correlation between time interval and intraoperative findings.

Time interval	Most common intraoperative finding
1-3 years	Adhesions
3-6 years	Bilateral ovarian masses
6-9 years	Unilateral ovarian masses

Table 4: Types of hysterectomy.

Type of operation	No. of cases	Percentage (%)
TAH	21	56.76
TAH with unilateral salpingo-oophorectomy	07	18.92
Vaginal hysterectomy	9	24.32

In this study of 37 patients the most common indication for hysterectomy was dysfunctional uterine bleeding (32.43%), followed by prolapse uterus (24.32%), PID (21.62%), fibroid (13.51%), adenomyosis (8.10%) (Table 5).

Table 5: Indications for hysterectomy.

Indications	No. of cases	Percentage (%)
DUB	12	32.43
Prolapse	09	24.32
PID	08	21.62
Fibroid	05	13.51
Adenomyosis	03	8.10

The most common symptom with which these patients presented was pain in abdomen (56.76%), followed by vague symptoms like abdominal distention, GI symptoms, burning micturition, and pelvic heaviness. In 10.81% patients, there were no symptoms and the presence of an ovarian mass was an incidental finding on USG (Table 6).

Table 6: Symptoms of patients.

Symptoms	No. of patients	Percentage (%)
Pain in abdomen	21	56.76
Abdominal distention	5	13.51
GIT symptoms	2	5.41
Urinary symptoms	4	10.81
Pelvic Heaviness	1	2.70
Asymptomatic	4	10.81

Out of the 37 patients, 3 patients had only intra peritoneal adhesions in absence of any ovarian pathology and 2 patients had acute appendicitis. Rest 32 patients had an ovarian pathology (Table 7).

Table 7: Intraoperative findings.

Intra-op findings	No. of patients	Percentage (%)
Ovarian pathology	32	84.49%
Intra peritoneal adhesions	3	8.11%
Acute appendicitis	2	5.40%

The most common pathology in these patients was a simple ovarian cyst (45.95%), followed by endometriotic cyst (21.62%), mucinous adenoma (8.10%), serous cyst adenoma (5.40%), serous cyst adenocarcinoma (2.70%) and poorly differentiated adenocarcinoma (2.70%) (Table 8).

Table 8: Histopathological reports of ovaries.

Histopathology	No. of patients	Percentage (%)
Simple ovarian cyst	17	45.95
Endometriotic cyst	8	21.62
Muscinous adenoma	3	8.10
Serous cyst adenoma	2	5.40
Serous cyst adenocarcinoma	1	2.70
Poorly differentiated adeno carcinoma	1	2.70

DISCUSSION

Generally hysterectomy is regarded by females as end of gynecological problems but emergence of a pelvic mass subsequently has profound physical and psychological impact.[3-5] Our preliminary study has looked into various possibilities along with its management.

Abdominal hysterectomy is still the commonest approach even if pre-requisite for vaginal approach are fulfilled. Multiple indications of operation in our series were in accordance with world literature.

Pelvic masses can originate from conserved ovaries either single or both, ovarian remnants[6], retained fallopian tubes, broad ligament, retroperitoneal structures and other pelvic viscera. Ovarian carcinoma is regarded as a silent killer and rank number one in mortalities caused by gynecological cancers. Cancers can originate from ovarian remnants as well.[7]

Oophorectomy after menopause is a standard procedure with hysterectomy but it is technically more difficult with vaginal hysterectomy. Common practice is to leave healthy ovaries behind if vaginal hysterectomy is performed in postmenopausal women for prolapse, as facilities for laparoscopic assisted vaginal hysterectomy are very limited even in teaching hospitals. This practice should be discouraged. Pelvic masses have wide spectrum of imaging characteristics and clinical manifestations. Ultrasonography (either abdominal or vaginal), doppler is important in diagnosis, in monitoring and determining malignant potential and is cost-effective.[8-10] CT scan and MRI can also be considered as useful adjuvants.

In our study 11 women were managed conservatively with simple unilocular cyst with complete resolution in 6-12 month, though they were not included in the present study. At laparotomy ovarian tumors were excised. In suspected malignancy staging and de- bulking were carried out. After histopathology report, malignant cases were referred to oncology department. Two patients sustained small bowel injury during dissection of pelvic masses, which were repaired interoperatively with no sequel.

CONCLUSIONS

Emergence of pelvic mass after hysterectomy poses diagnostic and therapeutic challenge to gynecologists. Review of operation notes are of immense help regarding indications of surgery, ovarian conservation or removal and the state of pelvic structures. What then should be offered to a woman undergoing hysterectomy for a benign disease? Oophorectomy should be encouraged with hysterectomy after menopause. The benefits should be clearly explained and estrogen replacement offered to these women. Operative intervention after hysterectomy needs careful dissection with bowel preparation, as adhesions are common in such cases.

In future, as the patients become more aware and the clinicians more enlightened on the long term benefits and risks of hormone replacement therapy, decisions might be easier for the patients and the clinicians alike.

Funding: No funding sources
Competing interests: There are no competing interests to declare
Ethical approval: The study was approved by the Institutional ethics committee

REFERENCES

1. Healthcare Cost and Utilization Project (HCUP), 1988–2001: A Federal-State-Industry Partnership in Health Data. Rockville, Md: Agency for Healthcare Research and Quality; July 2003.
2. Farquhar CM, Sadler L, Harvey SA, Stewart AW. The association of hysterectomy and menopause: a prospective cohort study. BJOG 2005;112:956-62.
3. Naz F, Begum A. Experience with pelvic mass following hysterectomy for benign diseases. Biomedica 2004;20:106-9.
4. Khaw KT, Walker WJ. Ultrasound guided fine needle aspiration of ovarian cyst. Diagnosis and treatment in pregnant and non-pregnant women. Clin Radiol 1990;41:105-8.
5. Sheth SS. Vaginal Hysterectomy In: John Studd Progress in obstetrics and gynaecology. Vol 10 London: Churchill Livingstone 1993;317-39.
6. Krige CF. Vaginal hysterectomy and genital prolapse repair. A contribution to vaginal approach to operative gynaecology. Johannesburg. Witwater-Stand University Press 1965.

7. Dereska NH, Comella J, Hibner M, Magina JF. Mucinous adenocarcinoma in an ovarian remnant. Int J Gynecol Cancer 2004;14:683-6.
8. Fleisher AC, Tait D, Mayo J. Sonographic features of ovarian remnants. J Ultrasound Med 1998;17:551-5.
9. Chiang G, Levine D. Imaging of adnexal masses in pregnancy. J Ultrasound Med 2004;23:805-19.
10. Farina GP, Baccoli A, Pani C. Retroperitoneal Sarcomas: our experience. G Chir 2004;25:163-6.

DOI: 10.5455/2320-1770.ijrcog20130202
Cite this article as: Bhatnagar P, Desai E, Patel U, Leuva B. Delayed re-laparotomy after total hysterectomy. Int J Reprod Contracept Obstet Gynecol 2013;2:12-5.