

การศึกษาเปรียบเทียบอาการสำคัญ และลักษณะของก้อนเนื้อรังไข่ ชนิดไม่ร้าย และชนิดมะเร็ง

Comparison of presenting symptoms and characteristics of Benign and Malignant Ovarian Tumors

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ABSTRACT

Background : Ovarian cancer was over 200,000 new diagnoses each year worldwide. It has the worst prognosis of all gynecological cancers, with an overall five year survival of about 35 %. In early cancers (FIGO Stage I or II) survival is 80-90 % compared with 25% in late cancer (FIGO Stage III and IV). Currently only 30% of patients are diagnosed in these early stages. No effective screening exists, so that prospect for earlier diagnosis of ovarian cancer.

Objective : To compare presenting symptoms and characteristics of benign and malignant ovarian tumors.

Material and Method :

A retrospective descriptive study was conducted. Medical records were reviewed all cases of ovarian tumors operated in Surin hospital during October 2008 to September 2010.

Results : Among 199 patients, 35 patients were diagnosed malignant ovarian tumor. The patients above 50 years were significantly related with malignant tumor. Abdominal mass, abdominal distension and abnormal vaginal bleeding were common symptoms in malignant group ($p < 0.001$). Tumor size above 10 cms. and postmenopausal status were statistically significant for the malignant ovarian tumor ($P < 0.001$). Bilaterality was significant in malignant compared with benign group ($p < 0.05$). The majority (about 86 %) of malignant tumor was epithelial ovarian cancer, serous cystadenocarcinoma was predominant histologic subtype (40 %case). Most of germ cell tumor was dysgerminoma (67.7%case). Torsion was major complication in both benign and malignant group. Fifty four percent of malignant tumor presented at an early stage.

Conclusion : Postmenopausal women, especially above 50 years, who presented symptoms with abdominal distension , abdominal mass and abnormal vaginal bleeding should be proper bimanual examination and appropriate investigation in the early period to diagnose the disease at an early stage.

Keywords : ovarian tumors, symptoms, benign, malignant

บทคัดย่อ

หลักการและเหตุผล : มะเร็งรังไข่ มะเร็งที่พบบ่อยเป็นอันดับที่สองของมะเร็งนรีเวชในประเทศไทย รองจากมะเร็งปากมดลูก ในแต่ละปีพบผู้ป่วยมะเร็งรังไข่รายใหม่ 200,000 คนทั่วโลกและมากกว่า 1,000 ราย ในประเทศไทย อัตราการรอด 5 ปีโดยเฉลี่ยประมาณ 35% แม้ว่าจำนวนผู้ป่วยรายใหม่จะไม่มากนักและมักพบในระยะลุกลามแล้ว ซึ่งใช้ค่าใช้จ่ายสูงในการรักษา และผลการรักษาไม่ดี อัตราการรอดชีพต่ำคือ 25% ในระยะลุกลาม (FIGO stage III or IV) เมื่อเทียบกับ 80-90% ในระยะแรก (FIGO Stage I or II) ปัจจุบันยังไม่มีการตรวจคัดกรองที่มีประสิทธิภาพเพียงพอเพื่อจะวินิจฉัยผู้ป่วยในระยะแรก

วัตถุประสงค์ : เพื่อศึกษาเปรียบเทียบอาการสำคัญ และลักษณะของก้อนเนื้อรังไข่ชนิดไม่ร้าย และชนิดมะเร็ง

สถานที่ศึกษา : กลุ่มงานสูติ-นรีเวชกรรม โรงพยาบาลศูนย์สุรินทร์

รูปแบบการวิจัย : ศึกษาเชิงพรรณนาแบบย้อนหลัง

วิธีการวิจัย : ทบทวนเวชระเบียนของผู้ป่วยที่เข้ารักษาด้วยการผ่าตัดก้อนเนื้อรังไข่ที่รพ.ศูนย์สุรินทร์ระหว่างวันที่ 1 ตุลาคม พ.ศ. 2551 ถึง 30 กันยายน พ.ศ. 2553

ผลการศึกษา : ผู้ป่วยจำนวน 199 ราย พบว่าเป็นมะเร็งรังไข่ 35 ราย อายุเฉลี่ยในกลุ่มที่เป็นมะเร็งและกลุ่มที่เป็นก้อนเนื้อรังไข่ชนิดไม่ร้าย คือ 48 ปี และ 37 ปี ตามลำดับ โดยผู้ป่วยที่มีอายุมากกว่า 50 ปีจะมีความเสี่ยงในการเกิดมะเร็งมากกว่า อาการสำคัญที่มารพ.ด้วยอาการท้องอืด คลำก้อนได้ที่ท้องน้อย และมีเลือดออกผิดปกติทางช่องคลอด มีความสัมพันธ์กับมะเร็งรังไข่อย่างมีนัยสำคัญทางสถิติ ($p < 0.001$) ขนาดก้อนเนื้อรังไข่ที่มากกว่า 10 ซม. การพบก้อนเนื้อรังไข่ 2 ข้าง และตรวจพบก้อนเนื้อรังไข่ในหญิงวัยหมดประจำเดือน พบว่ามีโอกาสที่จะเป็นมะเร็งได้สูง มะเร็งรังไข่ชนิดเยื่อบุผิว (Epithelial ovarian cancer) เป็นมะเร็งที่พบมากที่สุดประมาณ 86% โดยพบชนิด serous มากที่สุด (40%) ส่วนในกลุ่มมะเร็งจากเซลล์สืบพันธุ์ (Germ cell tumor) พบมะเร็งชนิด dysgerminoma มากที่สุด (67.7%) การบิดขั้วรังไข่เป็นภาวะแทรกซ้อนที่พบได้บ่อยในทั้งในกลุ่มมะเร็งรังไข่และก้อนเนื้อรังไข่ชนิดไม่ร้าย จากการศึกษาพบผู้ป่วยมะเร็งระยะแรก 54%

สรุป : หญิงวัยหมดประจำเดือนโดยเฉพาะในกลุ่มอายุมากกว่า 50 ปี ที่มารพ.ด้วยอาการท้องอืด คลำก้อนได้ที่ท้องน้อย และมีเลือดออกผิดปกติทางช่องคลอด ควรได้รับการตรวจร่างกาย ตรวจภายใน และมีการสืบค้นเพิ่มเติมเพื่อวินิจฉัยแยกโรคมะเร็งรังไข่ระยะแรก

คำสำคัญ : ก้อนเนื้อรังไข่ชนิดไม่ร้าย, อาการสำคัญ, มะเร็งรังไข่

Introduction

Ovarian neoplasm is the most fascinating tumor of the women in terms of its histogenesis, clinical behavior and malignant potentiality. It has been mentioned that ovarian tumors account for 15.0% to 25.0% of all primary malignancy in female genital organ¹. It is labeled as the common cause of death from gynecological malignancies^{2,3}. Ovarian neoplasm can occur in all age groups, vague symptom and no age is exempted. In young women, the most common benign ovarian neoplasm is germ cell tumor and among the older women epithelial cell tumor is common⁴. As ovary is an intra abdominal organ, diagnosis of ovarian malignancy is often late^{5,6}. Unlike cervical cancer, identification of high risk population for ovarian malignancy and ideal screening method is not available⁷.

Objective

To compare presenting symptom and characteristics of benign and malignant ovarian tumors.

Patients and Methods

All patients coming OPD or emergency department of obstetrics and Gynecology in Surin hospital from October 2008 to September 2010, who on abdominal or bimanual examination and abdominal ultrasound were found to have ovarian cyst or tumor and later underwent laparotomy, were included in the study. Information about age of patient,

parity, menopausal status, presenting symptoms, characteristic of tumors: bilaterality, tumor size, complication were recorded.

Histopathology report of each tumor was recorded from pathology department. At laparotomy staging of tumor was done according to FIGO (International Federation of Gynecology and Obstetrics) classification⁸, as well as biopsy was sent for histopathological examination.

Main outcome measures were age, parity, size of tumor, presenting symptom, menstrual status and bilaterality.

All the data was analyzed on SPSS version 11.5. Percentages and 95% CI was calculated. Chi-square test was applied to compare the presenting symptoms and characteristics of benign and malignant ovarian tumors.

Results

A total of 199 laparotomies were done for ovarian tumors during study period. There were 164(82%) benign tumors and 35(18%) malignant according to histopathology. Mean age of the patient with malignant tumors was 48.29 ± 14.1 years and 37.44 ± 12.2 years in benign group. The commonest symptom was pain in lower abdomen (84.0%). Patient who had presenting symptoms with abdominal distension, abdominal mass and abnormal vaginal bleeding was significantly more pronounced in malignant tumor as compared to their benign tumors ($p < 0.001$). Bilaterality,

tumor size more than 10 cms and women who achieve menopausal status less than 5 years were statistically significant for the

malignant ovarian tumor. Parity had no statistical difference between the two groups. ($P>0.05$) as shown in Table 1.

Table 1 : Comparison of Symptoms and characteristics among patients with benign and malignant tumors.

Symptoms	Malignancy Status of ovarian tumors				P-value for Chi-Square/Fisher's Exact test
	Benign (n =164)		Malignant (n=35)		
Characteristics	No	%	No	%	
Abdominal pain	133	84.7	24	15.3	> 0.05
Abdominal distension	17	10.4	12	13.3	< 0.001
Abdominal mass	44	26.8	21	60.0	< 0.001
Abnormal vaginal bleeding	6	3.7	10	28.6	< 0.001
Menopausal status					
premenopause	142	86.6	16	45.7	< 0.001
Postmenopause	22	13.4	19	54.3	
Bilaterality					
Unilateral	128	78.0	21	60.0	<0.05
Bilateral	36	22.0	14	40.0	
Age (Yrs)					
< 20	13	7.9	3	8.6	
20-50	130	79.3	18	51.4	< 0.001
> 50	21	12.8	14	40	
Parity					
0	66	40.2	10	28.6	> 0.05
1-2	61	37	11	31.4	
>3	42	22.6	14	40.0	
Size of tumor (cms.)					
< 5	7	22.6	2	5.7	< 0.001
6-10	84	51.2	10	28.0	
>10	43	26.2	23	34.8	

Table 2 : Ovarian Neoplasm related to age groups.

Type	< 20 yr	20-50 yr	> 50 yr
Coelomic	-	16	14
Germ cell	3	-	-
Non-specific mesenchyme	-	2	-

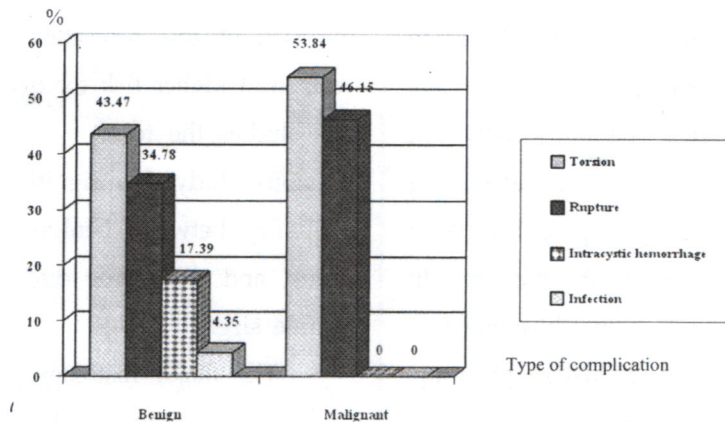


Figure 1 : Complications of ovarian tumors

Histology of benign tumors reveal endometriotic cyst in 45% cases followed by mature cystic teratoma in 21% case. The majority (about 86 %) of malignant tumor was epithelial ovarian cancer, serous cystadenocarcinoma was predominant histologic subtype (40 %case) followed by mucinous cystadenocarcinoma (30 % case). Most of germ cell tumor was dysgerminoma (67.7% case) and all of tumors in this group were found in woman age childhood and adolescent as shown in table 2.

Torsion was major complication in both benign and malignant group (43.47% and 53.84%) and was common complication in ovarian tumor during pregnancy as shown in Figure 1. Fifty four percent of malignant tumor presented at an early stage (I&II).

Discussion

Early diagnosis of ovarian cancer is a challenge to the gynecologist, mainly due to the fact that symptoms in early disease are vague and non specific. Diagnosis at earlier stage is of paramount importance, as early stage disease is limited to pelvis and ovary (stage I&II) and carries 80-95% survival, while that for stage III & IV (involving upper abdomen and beyond) is only 10-30%. Therefore, due the importance of early stage detection, large randomized ovarian screening trials with mortality as end point are underway in UK (UK collaborative trial of ovarian cancer screening).⁹

Presenting symptom with abdominal distension, abdominal mass were significantly more in malignant group. Several studies have shown that women with ovarian cancer experience abdominal, gestational and constitutional symptom, more as compared to those with benign tumor.^{10-13,15-18} Studies have compared these symptoms in normal women as well as in patients with early and late stage ovarian cancer¹⁴. One study show that 95% of women with ovarian cancer visiting primary care physicians, reported at least one of the above mentioned symptoms. In this studies, abnormal vaginal bleeding was significantly more than in malignant group, it was similar reported in other study.

The result of this study, mean age for benign group was 37 years, younger age group is reported in other studies as well. Most of patients (51%) with malignancy were in the older group (>50 years). Similar have been shown by other studies.

Size is an important determinant of malignant potential. Cyst < 5 cm in diameter are rarely malignant ,whereas cyst > 5 cm in diameter have a high probability of malignancy in the postmenopausal patient.¹⁹ In this study , the mean size of tumor in malignant group was 14 cm. and significantly malignant potential in tumor size more than 10 cm.

Whittemore and associates, in population-based study noted protection against ovarian cancer with increasing parity. On basis of a study of 197 women with

ovarian cancer, estimated that nulligravida were 2.45 times more likely to have malignant ovarian tumors than were women who had been pregnant three or more times.²⁰ One possible interpretation could be that the endocrinologic status of pregnancy protects against ovarian cancer and that the lack of this protection places infertile women at higher risk for ovarian cancer. In this studies the result was difference from previous study. No significant in number of parity between benign and malignant group, and it may be due to small study sample size.

The major histologic types occur in distinctive age ranges. Malignant germ cell tumors are most commonly seen in girls younger than 20 years, whereas epithelial cancers of the ovary are primarily seen in the woman older than 50 years²¹⁻²³. Our study mean age in malignant group was 48 years. The majority (about 86%) of malignant tumor was epithelial ovarian cancer, serous cystadenocarcinoma was predominant histologic subtype (40 %case). This is similar to almost all studies.²⁴

Delay in presentation is one of the big dilemmas with ovarian cancer and is responsible for high mortality associated with the disease. Similar delays have been reported in other studies. About 70% of malignant patient was presented in late stage (III&IV). In our study, malignant tumors presented at an early stage (54%case),which was more than previous several studies.

Presentation with acute abdominal pain due to ruptured tumors caused to be diagnose early stage cancer more than other studies.

Conclusion

Because of ovarian malignancy is a silent killer, especially in postmenopausal women. Although presentation is often vague and non specific, the symptoms are definitely present. Presenting symptoms with abdominal distension, abdominal mass and abnormal vaginal bleeding, especially in woman above 50 year, are important to recognize and should be proper bimanual examination and appropriate investigation in the early period to diagnose the disease at an early stage.

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