



Clinical Presentation of Epithelial Ovarian Carcinoma

Amina safdar¹ and Aamna Tariq²

¹WMO in BHU Gujranwala

Email: draminasaf@gmail.com

²WMO in BHU Dhamke Tehsil Sharaqpur

Punjab Pakistan. .

Email : aamnatarigaimc1@gmail.com

Abstract

Objective: To determine various modes of presentation of patients having epithelial ovarian carcinoma

Study design and duration: This is a cross sectional study of observational type. Study consists on the duration of six months.

Setting: This study was conducted in general surgical and chemotherapy ward of Nishtar Hospital Multan.

Patients and Methods: All cases diagnosed with epithelial ovarian cancer presenting to the study institution during study period were included in this study. A performa was designed containing necessary questions like signs and symptoms at the time of first presentation, menopausal status, age of patient, family history of similar problem etc. Questions were asked in simplified way and their answers were noted down. Grade of tumors was also documented. All data collected was analyzed using SPSS and Microsoft office version 2016. Results were calculated in the form of frequencies and percentages and averages. Tables and Graphs used to present data. Consent was taken from ethical committee of the study hospital and consent was also taken from all cases in study group.

Results: Total 60 cases were included in the study. 5% cases were below 20 years age, 25% were between 20-30 years, 16.7% between 30-40 years, 20% between 40-50 years, 23.3% between 50-60 years and 10% cases were above 60 years of age. Mean age was 44.6 years. There was positive family history in 25% cases. 78.3% cases were in premenopausal and 21.7% in post menopausal status. There were 8.3% cases in first stage, 16.7% in second stage, 55% in 3rd stage and 20% were in 4th stage of cancer at the time of presentation. Pathological grade reported was well differentiated in 30%, moderately differentiated in 41.7%, poorly differentiated in 18.3% and unknown grade in 10%.

Conclusion: Epithelial ovarian cancer is mostly found in young women and usually is reported in late stages. High frequency of positive family history is found in these cases.

Key Words: epithelial ovarian cancer, clinical presentation, family history

INTRODUCTION

Epithelial ovarian cancer is usually found in young female population. Such patients mostly have positive family history of similar or any other

malignancy.¹⁻⁵ So females with positive family history are at high risk. Usual presentation of these patients is abdominal pain, abdominal distension or abnormal bleeding from vagina etc. Mostly cases are in premenopausal period. CA 125 is tumor marker for epithelial ovarian carcinoma which is found raised in not all but most of the cases. BRCA gene mutation is associated with this tumor.^{6,7} This cancer accounts 90% of all ovarian cancers and a major cause of death from gynecological cancer.⁸⁻¹¹ Its incidence is different in various races. It is very common in Africans and Caucasians. Its rate is high in industrialized states. Its incidence is rising each year. It is common in post menopausal women mostly after 50 years of age. Reproductive factors like early menarche and late menopause are risk factors of this cancer. Other factors include nulliparity, lack of lactation, breast or endometrial cancer and family history of breast and ovarian cancer.¹²⁻¹⁵

Patients and Methods

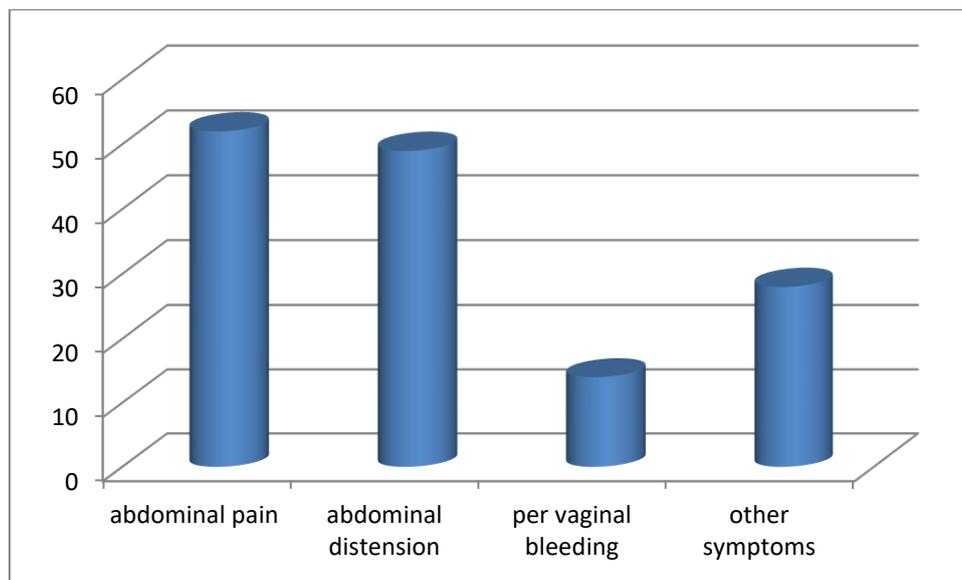
This is a cross sectional study started in October 2018 and completed in March 2019 after 6 months duration. Study was conducted in a tertiary care hospital Nishtar Hospital Multan. Cases were selected via randomized controlled trials. All cases diagnosed with epithelial ovarian cancer presenting to the study institution during study period were included in this study. A performa was designed containing necessary questions like signs and symptoms at the time of first presentation, menopausal status, age of patient, family history of similar problem etc. Questions were asked in simplified way and their answers were noted down. Grade of tumors was also documented. All data collected was analyzed using SPSS and Microsoft office version 2016. Results were calculated in the form of frequencies and percentages and averages. Tables and Graphs used to present data. Consent was taken from ethical committee of the study hospital and consent was also taken from all cases in study group. Privacy of data of all patients in study group was maintained.



Results

Total 60 cases were included in the study. 3(5%) cases were below 20 years age, 15(25%) were between 20-30 years, 10(16.7%) between 30-40 years, 12(20%) between 40-50 years, 14(23.3%) between 50-60 years and 6(10%) cases were above 60 years of age. Mean age was 44.6 years. This is a cross sectional study started in October 2018 and completed in March 2019 after 6 months duration. Study was conducted in a tertiary care hospital Nishtar Hospital Multan. Cases were selected via randomized controlled trials. All cases diagnosed

with epithelial ovarian cancer presenting to the study institution during study period were included in this study. There was positive family history in 25% cases. 47(78.3%) cases were in premenopausal and 13(21.7%) in post menopausal status. There were 5(8.3%) cases in first stage, 10(16.7%) in second stage, 33(55%) in 3rd stage and 12(20%) were in 4th stage of cancer at the time of presentation. Pathological grade reported was well differentiated in 18(30%), moderately differentiated in 25(41.7%), poorly differentiated in 11(18.3%) and unknown grade in 6(10%).



(Figure-1) frequency of presenting signs and symptoms among study group

Discussion

Ovarian cancer causes many deaths in America each year. It is a very common gynecological malignancy. Genes responsible for this malignancy are BRCA 1 and BRCA 2.¹⁵⁻¹⁸ Mutations of these genes cause ovarian cancer and other malignancies. Epithelial ovarian cancer is usually found in young female population. Such patients mostly have positive family history of similar or any other malignancy. So females with positive family history are at high risk. Usual presentation of these patients is abdominal pain, abdominal distension or abnormal bleeding from vagina etc.¹⁹ Mostly cases are in premenopausal period. CA 125 is tumor marker for epithelial ovarian carcinoma which is found raised in not all but most of the cases. BRCA gene mutation is associated with this tumor. This is a cross sectional study started in October 2018 and completed in March 2019 after 6 months duration. Study was conducted in a tertiary care hospital Nishtar Hospital Multan.^{20,21} Cases were selected via randomized controlled trials. All cases

diagnosed with epithelial ovarian cancer presenting to the study institution during study period were included in this study.²²⁻²⁵ A performa was designed containing necessary questions like signs and symptoms at the time of first presentation, menopausal status, age of patient, family history of similar problem etc. This cancer accounts 90% of all ovarian cancers and a major cause of death from gynecological cancer. Its incidence is different in various races. It is very common in Africans and Caucasians. Its rate is high in industrialized states.²⁶⁻²⁷ Its incidence is rising each year. There was positive family history in 25% cases. 47(78.3%) cases were in premenopausal and 13(21.7%) in post menopausal status. There were 5(8.3%) cases in first stage, 10(16.7%) in second stage, 33(55%) in 3rd stage and 12(20%) were in 4th stage of cancer at the time of presentation. Pathological grade reported was well differentiated in 18(30%), moderately differentiated in 25(41.7%), poorly differentiated in 11(18.3%) and unknown grade in 6(10%). It is common in post



menopausal women mostly after 50 years of age. . All data collected was analyzed using SPSS and Microsoft office version 2016. Results were calculated in the form of frequencies and percentages and averages. Tables and Graphs used to present data. Consent was taken from ethical committee of the study hospital and consent was also taken from all cases in study group. Privacy of data of all patients in study group was maintained.

Reproductive factors like early menarche and late menopause are risk factors of this cancer. Other factors include nulliparity, lack of lactation, breast or endometrial cancer and family history of breast and ovarian cancer.

Conclusion: Epithelial ovarian cancer is mostly found in young women and usually is reported in late stages. High frequency of positive family history is found in these cases.

REFERENCES

1. Merino MJ, Jaffe G. **Age contrasts in ovarian pathology.** Cancer (Suppl) 1993; 71: 537-44.
2. Franceschi S. **Risk factors for epithelial ovarian cancer in Italy.** Am J Epidemiol 1982; 115(5): 714-19.
3. Ahmed J, Hashmi MA, Naveed IA. **Spectrum of malignancies in Faisalabad: 1986-90.** Pak J Pathol 1992; 3: 103-10.
4. Jaffery NA, Zaidi SHM. **Cancer in Pakistan.** J Pak Med Assoc 1987; 37: 178-83.
5. Malik I, Khan W, Khan Z. **Pattern of malignant tumors observed in a University Hospital: a retrospective analysis.** J Pak Med Assoc 1998; 48: 120-22.
6. Bhurji Y, Bhurji A, Hassan SH. **Cancer incidence in Karachi, Pakistan: first results from Karachi Cancer Registry.** Int J Cancer 2000; 85: 325-29.
7. Khan SM, Gillani J, Nasreen S. **Cancer in North West Pakistan and Afghan refugees.** J Pak Med Assoc 1997;47: 122-24.
8. Ahmed M, Khan AH, Mansoor A. **The pattern of malignant tumors in Northern Pakistan.** J Pak Med Assoc 1991; 41: 201-73.
9. Holschneider CH, Berek JS. **Ovarian cancer: Epidemiology, biology and prognostic factors.** Sem Surg Oncol 2000; 19(1): 3-10.
10. National Center for Health Statistics, **Division of Vital Statistics** (Provisional Data). Hyattsville,MD. 1989.
11. Ahmed Z, Kayani N, Hasan S, Muzaffar S. **The morphological pattern of benign and malignant ovarian neoplasms.** J Pak Med Assoc 2000; 50: 416-18.
12. Jamal S, Malik IA, Ahmed M. **The pattern of malignant ovarian tumors: study of 285 consecutive cases at the Armed Forces Institute of Pathology, Rawalpindi.** Pak J Pathol 1993;4:107-10.
13. Miller BA, Ries LAG, Hamley BF. **SEER Cancer statistics review, 1973-1990.** Bethesda, MD; National Cancer Institute,1993.
14. Rubin SC, BenjaminI, Behbakht K. **Clinical and pathological features of ovarian cancer in women with germ-line mutations of BRCA1.** New Eng J Med 1996;335: 1413-16.
15. Malik IA. **A Prospective study of clinicopathological features of epithelial ovarian cancer in Pakistan.** J Pak Med Assoc 2002;52:155-60.
16. Malkesian GD. **Prognostic significance of histological classification and grading of epithelial malignancies of the ovary.** Am J Obstet Gynecol 1984;149: 274-84.
17. Bjorge T. **Prognosis of 2800 patients with epithelial ovarian cancer diagnosed during 1975-94 and treated at the Norwegian Radium Hospital.** Gynecol Oncol 1998; 77:777-81.
18. Chen Y, Wu PC, Lang JH. **Risk factors for epithelial ovarian cancer in Beijing, China.** Int J Epidemiol 1992; 21:23-9.
19. Nandakumar A, Anantha N, Dhar M. **A case-control investigation on cancer of the ovary in Bangalore, India.** Int J Cancer 1995; 63:361-65.



20. Ozols RF, Rubin SC, Dembo AJ. **Epithelial ovarian cancer**. In Hoskins WJ, Perez CA, Young RC (ed.): Principles and Practice of Gynecologic Oncology. TB Lippincott, 1992, p.731.
21. Muzaffar M, Khawaja K, Rizwan I. A **Clinicopathological study of 107 ovarian tumors**. J Pak Med Assoc 1987; 37: 194-97.
22. **Female reproductive system**. In Rosai J (ed.): Ackerman's Surgical Pathology. Sixth edition ST Louis Mosby 1996, p. 1475.
23. Crum CP. The female genital tract. In Cotran RS, Kumar V, Collins T (ed.): **Robbins Pathologic Basis of Disease**. Sixth edition WB Saunders Company, 1999, p.1068.
24. Mahdy NH, Abdel-Fatteh M, Ghanaem H. **Ovarian cancer in Alexandria from 1988 to 1997: trends and survival**. Eastern Med Health J 1999;5:727-39.
25. Bettachi S. **Epidemiological factors and prophylaxis of ovarian tumors**. Eur J Gynecol Oncol 1982; 3: 192-205.
26. Aksu M, Koseby T, Bese T. **Survival of endometrial and ovarian cancers in Cerrahpasa Medical Faculty, Turkey**. Gynecol Oncol 1997; 76: 15-17.