MALIGNANT OVARIAN TUMOR

Tanvir Jamal

Department of Gynaecology and Obstetric Khyber Medical College and Khyber Teaching Hospital, Peshawar.

SUMMARY

This study was conducted to find out the incidence of malignant ovarian tumor in the total histology specimen over one year period (from January 1998 – December 1998). Total of 3095 specimen were received in the histology section of the Pathology Department, Lady Reading Hospital, Peshawar. 155 out of these were ovarian specimen. 36 (39.9%) of the ovarian specimen were malignant i.e. 1.2 % of the total 3095. When this figure was compared with the statistics from IRNUM (Institute of Radiotherapy and Nuclear Medicine) they had received 86 patients during the period for the treatment of malignant ovarian tumor 17.2% of the total female admission.

Introduction

Ovarian malignancy accounts for the 25% of all gynaecological cancer and 50% of all deaths from cancer of the genital tract. The life time risk of developing Ovarian cancer (1.4%) is higher than that of Carcinoma cervix (1.25%) or of endometrium (1.1%). The death rate outnumbers both of them combined and according to American Cancer Society has diagnosis to death ratio of 1.6:1.1 It is depressing to note that initial presentation is at stage-III or IV and at this stage of wide dissemination treatment outcome is extremely poor, (10% - 5 years survival rate).

Though if diagnosed at stage-I,³ cure rates as high as 98 % can be achieved. The aim of this study is to emphasize the point that efforts should be made to diagnose Ovarian Cancer at an early sage.⁹

MATERIAL AND METHODS

We collected the result of one year histology specimen from the Pathology Department Lady Reading Hospital, Peshawar to find out the incidence of malignant Ovarian tumor and compared it to the Irnum statistics. Following is the result.

Total specimen received for histopathology - 3095.

176

Ovarian specimen - 155, 4.7 % of the total.

Out of Neoplastics differentiation was as follows

Malignant Ovarian were 1.2 % of the total specimen received for histopathology. When this figure was compared with the Irnum statistics during the same time period (1998), their figure came out to be 17.2 %. Following is the result from IRNUM.

| Total Ovarian | Non Neoplastic | Neoplastic |
|---------------|----------------|------------|
| 155 | 64 | 91 |
| 100% | 41.9% | 59.1% |

TABLE - 1

RESULTS

The difference in the figure is because at IRNUM patients are received for Radio-therapy or Chemotherapy from all over the province and also because patients are at first investigated or treated by surgery at the district hospitals and are referred to IRNUM after the diagnosis of malignancy is confirmed by histology or for further treatment after debulking surgery. IRNUM statistics were taken among female admissions only and the incidence nearly equals the international incidence of malignant ovarian tumor. 95% of these cases when diagnosed were in advanced stages.

DISCUSSION

Ovarian tumor is known for the late presentation and adverse outcome, it is prevalent in white women of North European origin in their forties with a peak at 50 – 70 year of age. 3-5% have familial predisposition. 90% of the malignant Ovarian Tumor are epithelial in origin while 10% are sex cord stromal or germ cell in type.

Over the years attempts have been made to improve the prognosis in Ovarian Tumor by early diagnosis² and by improving the

| Total | Benign | Malignant |
|-------|--------|-----------|
| 91 | 55 | 36 |
| 100% | 61.1% | 39.3% |

TABLE - 2

existing therapeutics techniques. There is no proper screening programme available for ovarian cancer.⁴ In came contrail screening for detection of ovarian cancer in the early stage is available but is not cost effective.⁸

Early detection is possible by bimanual pelvic examination, ultrasound⁵ and tumor makers especially Ca-125^{10,11}. High risk population includes woman of more than 45 year age, those living in industrialized area and 1st degree relatives of patients to silk ovarian breast cancer.⁶

Prevention of the disease is also possible by prophylactic ophorectomy in women who are at high risk. It is suggested that laparotomy may be done by an experienced gynaecologist and patient receives adequate chemotherapy and is followed up by tumor markers¹² scans, clinical examination or interval surgery.⁷

Conclusion

Although much has been done on this subject but morbidity and mortality is still very high. The diagnosis of ovarian tumour in early stages remained dilemma of the past century. In the new millennium we may be able to strain live screening programme for ovarian cancer. Most of the screening programmes because of their cost, invasiveness and poor acceptability can not be applied to the general population as is in the case of pap smear for carcinoma cervix.

| Total female admission (1998) | Malignant Ovarian Tumour |
|----------------------------------|-----------------------------|
| 1565 | 86 |
| 100% | 17.2% |

TABLE - 3

REFERENCES

- A. Prys Davies D. Oram Screening of Ovarian Cancer John Studd. Progress 9.
- Andolf E. Sualenius E Astedt B. U/S for early detection of Ovarian Cancer Br J Obstet Gynaecol 1986; 93: 1286.
- Bost RC, Knapp RC. Hormonal markers for epithelial Ovarian carcinoma. In piver (ed) Ovarian malignancies Churchil Livingstone, Edinburgh, 1987; 11.
- Best RC, Boyer CM, Olt GJ et al. Identification of markers for early detection of epithelial Ovarian Cancer. In: Sharp F, Mason WP, Leake RE (ends) Ovarian Cancer Biological and Therapeutic Challenges. Chapman & Hall, London 1990; 265.
- Bourne T, Campbells, Steer C, Whitehead M I, Collins WP. Transvaginal Colour flow imaging. A possible new screening technique for Ovarian Cancer. Br. Med J. 1989; 299: 1367.
- Cesagrande JT, Louie EW, Pike MC, Roys, Ross RK, Henderson BE. Incessant evaluation and Ovarian Cancer. Lancer ii 1979; 166.

- Dembo AJ, Davy M, Stenuig AE, Berle EJ, Bush RS, Kjorstaf K. Prognostic factors in patients with stage I epithelial Ovarian Cancer Obstet Gynaecol, 1990; 75: 263.
- Goswamy RK. Canbell S, Roystone JP et al. Ovarian Size in postmenopausal women. Br. J Obstet Gynaecol, 1988; 95: 795.
- Kottmeir H. (ed) 1982 Annual report on the results of treatment in gynaecological cancer FIGO, Stockholm.
- Ricolleanu G. Chatal JF, Fumoleau Petal. Radioimmunoassay of the CA 125 Antigen of Ovarian Carcinomas, advantages compared with CA 19-9 and CEA tumour biol. 1985; 5: 151.
- Xu FJ, Ramakreshans S Daly 1991 M-CSF as a serum marker for Ovarian Cancer (in preparation).
- Zuraski VR, Sjo Val K, Schoenfeld DA et al. Prospective evaluation of serum CA 125 levels in a normal population; phase-I: The specificities of single and serial determinations in testing for Ovarian Cancer. Gynecol Oncol, 1991; 36: 299.