INTRODUCTION

Female genital tract malignancies are those of the Uterus, Ovary, Cervix, Vulva, Vagina and Gestational trophoblastic disease leading to consumption of major health finances for associated morbidity and mortality. Lack of awareness, late diagnosis and late presentation to the hospital worsen the disease. The frequency of different malignancies in different regions of the world depend upon different genetic and socioeconomic status. Endometrial cancer is the commonest malignancy in the world. As noted in the UK, there were more than 9000 cases in the year 2015.1

Risk factors are increased BMI, diabetes, infertility, and endometrial hyperplasia. A cut-off of 4 mm is used for endometrial thickness in the postmenopausal woman.2 Majority patients present in the age group >60 years. Endometrial biopsy plays a great role in ruling out malignancy in patients >35 years and with postmenopausal bleeding. Common presentation is postmenopausal bleeding. TVS is used for endometrial thickness, followed by endometrial biopsy. Among this population, 20-25% of cases are diagnosed with endometrial cancers.3

Cervical malignancy has a higher incidence in well-developed countries due to multiple sexual partners, and young age at first sexual activity 3 Under-developed countries have frequent cases due to a lack of population-based screening programs and awareness.4 Screening and vaccination have played a great role in preventing cervical malignancy.5 HPV infection, young age at sexual activity and multiple sexual contacts are the main risk factors. Intermenstrual and postcoital bleeding are common presentations. Cytology, colposcopy and biopsy help in diagnosis. Staging includes biopsy, EUA (rectovaginal examination, cystoscopy, proctoscopy), and imaging studies, including chest Xray, IVU and MRI pelvis.6

A second common cause of maternal mortality is ovarian malignancy due to presentation in advanced stage.6 Overall incidence of disease in the UK is 2% and considered a silent killer in 75% of cases due to its complex intrinsic nature and late presentation. Mass abdomen, abnormal bowel / urinary habits, abdominal distension and ascites are common symptoms.7 Risk factors are infertility, family history, BRCA 1 and 2, MMR (mutation of mismatch repair) and use of HRT. Breastfeeding and oral contraceptive pills should
be encouraged to minimize the risk of ovarian malignancy. Epithelial ovarian cancer has five sub-histopathology types. High-grade serous is most dangerous. After gynaecological examination, TVS, CA 125 and CECT abdomen pelvis, we proceed to tumor debulking surgery. GTD is seen among women with ages ranging between 30-39 years. Vulvar cancer involving the vulva, external genitalia, clitoris, mons pubis, urethral, vaginal opening and inner part of labia majora and more. The most common type of vulval cancer is squamous cell Carcinoma.

The purpose of the study was to review trends of different gynaecological malignancies in Combined Military Hospital Lahore because, despite a huge number of gynaecological malignancies, our data was not maintained and highlighted. In this study, the common presentation of postmenopausal bleeding was highlighted. Gynaecological malignancies consume main health financial resources, so patient care should be a basic priority by using multiple discipline of expertise.

**METHODOLOGY**

This cross-sectional study was conducted at the Department of Gynaecology and Obstetric Combined Military Hospital Lahore Pakistan, from January 2015 to December 2019. Approval from the Hospital Ethical Committee was taken (166/2020). The sample size was calculated using the WHO sample size calculator, taking a confidence interval of 9% margin of error and 5% reported prevalence of gynaecological malignancy 12.5%. The estimated sample size came out to be 107. Non-probability consecutive sampling technique was used.

**Inclusion Criteria:** Women with perimenopausal/postmenopausal bleeding, family history of gynaecological malignancy, mass abdomen, bowel, and urinary symptoms were included in the study. Patients with persistent vaginal discharge and intermenstrual and postcoital bleeding were also included.

**Exclusion Criteria:** Healthy volunteers and women with severe medical disorders were excluded from the study because of adverse outcomes related to poorly controlled medical disorders.

Written informed consent was taken. History regarding patient age, marital status, parity, obstetrical, gynaecological history, family history, and risk factors related to different malignancies, the onset of symptoms was taken. The examination included measurement of blood pressure, pulse, pallor, and body mass index. A detailed gynaecological examination was done, including abdominal, speculum and vaginal examination.

Baseline investigation included a complete blood picture, blood group and Rhesus factor, urine routine examination, and hepatitis B and C screening. Pelvic ultrasound for uterine, adnexal pathology and endometrial thickness was done. Endometrial pathology was ruled out by outdoor Pippelle sampling. MRI pelvis, CECT chest, abdomen and pelvis were done for endometrial, cervical and ovarian CA staging.

Family counselling was the main step prior to proceeding to surgery. Patients at admission were counselled about surgical procedures, complications, and postoperative follow-up. Tumour board, Oncologist, anaesthetist and ICU facilities were provided. Blood products were arranged and high risk. Written informed consent was taken.

All information related to patient history, symptoms, clinical, histopathological and radiological findings were documented in the proforma. Statistical Package for Social Sciences (SPSS) version 23.0 was used for the data analysis. Descriptive Statistics were used to describe the results like frequency and percentage for the quantitative variable. All data were collected regarding common trends of gynaecological malignancy with common malignancy, mean age, common presenting complaints, and histopathological type of cancer.

**RESULTS**

A total of 107 women were registered in this study. Common gynaecological malignancy observed was endometrial cancers, seen in 51 women (47.6%), and the common presenting complaint was bleeding per vagina among 27 women. Table-I showed a mean Age of 46.9±9 with a range of 45-65 years.

| Table-I: Different age groups for CA Endometrium (n=51) |
|------------------------------------------|-----|
| Age Groups                  | n (%) |
| 40-45 years                 | 3 (5.8) |
| 45-55 years                 | 42 (82.30) |
| 55-65 years                 | 6 (11.7) |

Endometrial cancer with a common trend of patients 51 (47.6%), followed by ovarian cancer 32 (29.9%) and GTD 17 (15.8%). CA cervix and vulva were 6 (5.6%) and 1 (0.9%), respectively (Figure).

Adenocarcinoma was a common histopathology type in endometrium cancers observed in 47 women (92.1%) (Table-II).
Results also showed preinvasive cervical lesions, which were seen in seven patients. Among these, three patients were with ASCUS, two were with AGCUS, and two were with adenocarcinoma.

Afroz et al. showed cervical malignancy as more frequent (53%) than ovarian malignancy (29%).

The most common presenting complaint in our study was vaginal bleeding (52.9%) which was also reported in another study done in Nigeria.

The second common malignancy in our study was ovarian cancer (29.9%) which was very close to the study conducted by Bibi et al. showing results of 30%, and Afroz et al. showed ovarian malignancy up to 29%. The common presenting complaint was mass abdomen.

In another study, ovarian cancer was ranked high in Karachi and fourth in Lahore. Ovarian cancers usually present late hence difficult to manage.

The mean age at presentation of endometrial cancer was 46.9 years in our study, with most presenting in the range of 45-65 years, which was comparable with an age mentioned in another study, showing its more frequency in the fifth and sixth decade of life.

Common histopathology among endometrial tumours were adeno CA with grade 2. Similar results were shown in the studies by Afroz et al. and Madhutandra et al.

In our study, cervical cancers were 5.6%. It is unusual in our community because of Islamic culture and practices. Multiple sexual partners culture is not part of our society, and women are monogamy.

A previous study conducted in different parts of Pakistan also showed HPV as the most common cause of cervical cancer. HPV is transmitted through the sexual route.
Gestational trophoblast disease was 15.8% in our study, which was comparably high as compared to the 6% low incidence reported in another study conducted by Manzoor et al. at Quetta. Incidence of vulvar tumours is very low in Asia compared to North America/Europe.

More emphasis is required on women’s awareness regarding the disease process. Access to medical help should also be improved. Free Screening programs should be arranged and offered to the population to reduce the burden of advanced-stage disease.

**LIMITATIONS OF STUDY**

Data collection was the most difficult task during this study. The main reason was inadequate data maintenance and endometrial cancer incidence: what are intended consequences of declining hysterectomy rates? Front Oncol 2016; 6(1): 89-92. doi: 10.3389/fonc.2016.00089. eCollection 2016.

**REFERENCES**