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#### ORIGINAL ARTICLE

# Histopathological Pattern and Post-Operative Surgical Outcomes of Gynaecological Malignancies: Three Months Experience in a Teaching Hospital of Bangladesh

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### **Abstract**

**Background:** Gynaecological malignancies are not uncommon in Bangladesh. **Objective:** The purpose of the present study was to see the histopathological pattern and post-operative surgical outcomes of gynaecological malignancies. **Methodology:** This clinical trial was conducted in the Department of Gynaeoncology at Dhaka, Medical College, Dhaka, Bangladesh from July to September 2019 for a period of three months. All the women presented with gynaecological malignancies with the age group of more than or equal to 18 years were selected as study population. The different patterns of gynaecological malignancies were diagnosed by histopathological examination after surgical operation. The immediate post-operative outcomes were measured. **Result:** A total number of 105 cases of gynaecological indoor patients were performed of which ovarian tumor was found in highest number which was 53(50.5%) cases followed by carcinoma of cervix (22.8%), endometrial carcinoma (5.7%) and vulval carcinoma (1.9%). The most common ovarian cancer was serous type carcinoma which was 14(26.4%) cases. In this study 101(96.2%) cases were survived and the rest 4(3.8%) cases were died. **Conclusion:** In conclusion most common cause of gynaecological operation has been performed due to ovarian tumor, carcinoma of cervix and endometrium. [*Journal of Current and Advance Medical Research, July 2020;7*(2):60-63]

**Keywords:** Histopathological pattern; post-operative; surgical outcomes; gynaecological malignancies

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#### Introduction

Cancers of the female genital tract are an important causeof cancer morbidly and mortality worldwide<sup>1</sup>. Cervical, endometrial and ovarian cancers are relatively more common, whereas vulval, vaginal, fallopian tube cancers and choriocarcinoma are very rare. The distribution andfrequency of these tumors vary from one region to theother<sup>2</sup>.

Cervical cancer is the fourth most common canceraffecting women worldwide, after breast, colorectal andlung cancers<sup>3</sup>. It is also the fourth most common cause ofcancer death in women worldwide. Almost 70.0% of the global burden falls in areas with lower levels ofdevelopment<sup>4</sup>. High frequency rates are found in Eastern, Western, Southern and Central Africa, South-Central Asia, South America, and Melanesia. Rates are lowest in Western Asia, North America and Australia or NewZealand<sup>5</sup>. The incidence and mortality of cervical cancerhad declined in North America during the last fifty yearsby two-thirds to its present rank as the eight leading causeof cancer mortality, as an outcome of effective cervicalscreening programs and treatment for premalignant lesions of the cervix<sup>6</sup>. The purpose of the present study was to see the histopathological pattern and post-operative surgical outcomes of gynaecological malignancies.

#### Methodology

This clinical trial was conducted in the Department of Gynaeoncology at Dhaka Medical College, Dhaka, Bangladesh from July to September 2019 for a period of three months. All the women presented in indoor of gynaeoncology department with gynaecological malignancies with the age group of more than or equal to 18 years were selected as study population. The different patterns of gynaecological malignancies were diagnosed by histopathological examination after surgical operation. The immediate post-operative outcomes were measured. Histopathological diagnosis was made in the Department of Pathology of the same institute and other private institute. All relevant data on histopathologically proven malignantcases were retrieved from the histopathology requestforms and register. All the data obtained were tabulatedand analyzed.

#### Result

A total number of 105 cases of gynaecological patients were admitted in indoor. Among the patients, ovarian tumor was found in highest number which was 53(50.5%) cases followed by

carcinoma of cervix, endometrial carcinoma and vulval carcinoma which were 24(22.8%) cases, 6(5.7%) cases and 2(1.9%) cases respectively. However, persistent GTD was found in 20(19.1%) cases (Table 1).

**Table 1: Distribution of Total Gynaecological indoor patients in Three Months Period** 

Types of Malignancies	Frequency	Percent
Ovariantumor	53	50.5
Ca of Cervix	24	22.8
Endometrial Ca	6	5.7
Vulval Ca	2	1.9
Persistent GTD	20	19.1
Total	105	100.0

GTD=Gestational Trophoblastic Disease

The most common ovarian cancer was serous type carcinoma which was 14(26.4%) cases followed by Adenocarcinoma which was 13(24.5%) cases. Mucinous, benign and dysgerminoma were found in 4(7.6%) cases, 5(9.4%) cases and 2(3.8%) cases respectively. Granulosa cell tumour and malignant fibroma hystocytoma were found in 1(1.9%) cases in each (Table 2).

**Table 2: Distribution of Ovarian Tumor (n=53)** 

Types	Frequency	Percent
Serous Carcinoma	14	26.4
Adenocarcinoma	13	24.5
Mucinous	4	7.6
Dysgerminoma	2	3.8
Granulosa cell tumour	1	1.9
Malignant fibroma	1	1.9
hystocytoma		
Benign	5	9.4
Referred for palliative	5	9.4
support		
Unknown	8	15.1
Total	53	100.0

Among the carcinoma cervix majority were SSC which was 20(83.3%) cases followed by adenocarcinoma and sarcoma which were 3(12.5%) cases and 1(4.2%) cases respectively (Table 3).

Table 3: Pattern of Carcinoma Cervix (n=24)

Ca Cervix	Frequency	Percent
SSC	20	83.3
Adenocarcinoma	3	12.5
Sarcoma	1	4.2
Total	24	100.0

In this study 101(96.2%) cases were survived and the rest 4(3.8%) cases were died (Table 4).

**Table 4: Clinical Outcome of Study Population** 

Clinical Outcome	Frequency	Percent
Survival	101	96.2
Death	4	3.8
Total	105	100.0

In this study a total number of 41 cases were operated for treatment purpose of which 25(61.0%) cases were ovarian tumor. However, Carcinoma of cervix and endometrial carcinoma were operated in 5(12.2%) cases in each (Table 5).

**Table 5: Surgical Treatment of Study Population** 

Surgical Treatment	Frequency	Percent
Ovarian	25	61.0
Carcinoma of Cervix	5	12.2
Endometrial Carcinoma	5	12.2
Molar: Suction	6	14.6
Evacuation and		
Curettage		
Total	41	100.0

## Discussion

In this study a total number of 105 cases of gynaecological IPD patients were performed of which ovarian tumor was found in highest number which was 53(50.5%) cases followed by carcinoma of cervix, endometrial carcinoma and vulval carcinoma which were 24(22.8%) cases, 6(5.7%) cases and 2(1.9%) cases respectively. However, persistent GTD was found in 20(19.1%) cases. The pattern of gynecological malignancies is different in various geographical areas. Cervical cancer is one of the leading cancers in women worldwide; 70.0% of new cases occur in developing countries<sup>7</sup>. Similar to this present study the cervix is the commonest site of malignant tumors of the female genital tract in another study<sup>8</sup>. This correlates well with some local studies<sup>5-9</sup>. Cancer cervix incidence varies with geographical region andethnicity<sup>10</sup>. The proportion of cervical cancer however, low (only indoor patient) when compared with 71.4% cases from local study<sup>11</sup>, 80.0% cases reported in India<sup>8</sup> and 85.2% reported in Nepal<sup>12</sup>. In Bangladesh, genital cancer is increasing day by day<sup>8</sup>. Among those cervical cancer is the most common and it ranks as the second most frequent cancer among women and the second most frequent cancer among women between seeking counseling for anxiety,

mood changes, and relationship concerns establishing good sleeping habits and getting plenty of rest doing Kegel exercises to strengthen the pelvic floor talking to friends and family about the experience of menopause limiting the intake of alcohol. According to hospitalbased statistics it constitutes 22.0% cases to 29.0% cases of the female cancers in different areas of the country<sup>8</sup>. Current estimatesindicate that annual incidence of cervical cancer is 11956; about 80% women come for treatment in advance stage and 6582 die from the disease<sup>13</sup>.

Despite the high frequency of some female genital tumors in our environment, there is paucity of literature on the subject. Therefore, this study has been designed to provide information regarding the pattern of gynecological malignancies and their relative frequencies in relation to female genital tract. These findings has a significant implication to devise strategies for effective screening, early diagnosis and timely management to reduce the morbidity and mortality from these cancers<sup>8</sup>.

Cervical cancer is a preventable disease. It is declining inthe last three or four decades in most developed countriespredominantly due to effective population based cervicalscreening programs, treatment of pre-invasive condition, decreased parity and better living condition<sup>1</sup>. Low rates are also observed in China, in western Asia and most of the Muslim countries<sup>14,15</sup>. In a study of gynecological cancer profile, less cigarettesmoking religious practices females, malecircumcision are thought to be some of the possiblereasons for the low incidence of cervical cancer<sup>16</sup>. Thesame practices may be operative in other Muslim countries as well.

In Bangladesh, Government and some non-governmentalorganizations have taken programmatic steps towardscontrolling cervical cancer by developing cervical cancerscreening program and approval of vaccination for the prevention of HPV16 and HPV18 induced cervical cancer. Unfortunately, these measures are not yet effective insignificant reduction in the burden of cervical cancer. The frequency can be reduced by awareness program on the importance of Pap smear examination and the servicemade available and affordable to the population.

#### **Conclusion**

In conclusion most of the gynaecological operation are performed due to ovarian tumor which is the

highest number followed by carcinoma of cervix, endometrial carcinoma and vulval carcinoma. The most common ovarian cancer is serous type carcinoma. However, majority are SSC among the carcinoma cervix. In this study most of the cases have survived. Further countrywide survey is needed to get real scenario.

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