A STUDY OF OVARIAN TUMOUR MANAGEMENT IN A TERTIARY HEALTH CARE FACILITY FROM CENTRAL INDIA

Dr. Amol Dongre[1], Dr. Shriram Kane[2]

[1]Associate Professor Dept. of Medical Oncology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe) Wardha

[2]Professor Dept. of Medical Oncology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe) Wardha

ARTICLE INFO	ABSTRACT
Research Article **Corresponding Author:** **Dr. Shriram Kane** Professor Dept. of Medical Oncology Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences Sawangi (Meghe) Wardha	**BACKGROUND**: Ovarian cancer is the sixth most frequent cancer in women and the second most prevalent gynaecological malignancy. It has the greatest mortality rate of any gynaecological cancer, with a 5-year survival rate of 46%. The severe disease at the time of diagnosis is a major contributor to the high death rate, making it critical to identify these lesions early in their progression. **AIM AND OBJECTIVE**: The goal of this study is to see how patients with ovarian tumours are treated at a tertiary health care facility. **METHODOLOGY**: This trial lasted two years and included 120 individuals with ovarian cancer. A pre-tested questionnaire was used to collect data. Sociodemographic information, clinical history, and a clinical assessment were all included in the study. The treatment was tailored to the specific form of ovarian tumour. The effects of an ovarian tumour have been observed. Data was analysed using statistical tests. **RESULTS**: Ovarian cancer was found to be 5.9% of the time. In the study, 65 percent of the tumours were benign, whereas 35 percent were malignant. Cystectomy was the most common treatment for ovarian tumours (44.8 percent). **CONCLUSION**: Cystectomy was the most prevalent treatment for ovarian tumours (44.82 percent), followed by total abdominal hysterectomy and bilateral salphingo oopherectomy (29.31 percent). **KEYWORDS**: ovarian tumours, gynaecological malignancy, adnexal mass.

INTRODUCTION

The ovary is the important organ in charge of a person's reproductive capacity. Ovarian tumours are the most frequent type of neoplasm in women, accounting for approximately 30% of all genital tract tumours[1]. The most prevalent cause of mortality in gynaecological cancer is ovarian tumour, which is the sixth most common cancer in people. Around 70% of tumours arise in women of reproductive age. After cervix cancer, ovarian cancer is the second most prevalent malignancy of the female genital tract[2]. In India, it accounts for 10-15% of all genital cancers. Every year, it kills more women than all other types of genital cancer combined. The high death rate associated with ovarian cancer can be linked to the disease's late state at the time of diagnosis and the failure of complete excision of the tumour after surgery[3]. As a result, it is critical to know the nature of the tumour, whether benign or malignant, at the therapeutic stage in order to plan and perform the first surgery optimally. The challenge of ovarian tumour pre-operative diagnostics has not yet been totally overcome. Especially in India, where resources are few[4]. As a result, some patients will certainly have suboptimal onco-reductive procedures, while others will be understaged and at danger of under treatment. Many cases of ovarian tumours occur in advanced stages, with a dismal 5-year survival rate, due to the generally asymptomatic nature of the early stages of the disease. Up to 70% of cases are discovered in advanced stages, with a death rate of 70% in 2 years and 90% in 5 years[5]. This has sparked interest in ovarian cancer research methodologies. Adnexal masses are a typical symptom of ovarian tumours. Any mass occupying an area of the uterine appendages is referred to as an adnexal mass (adnexa)[6]. Because of unique behaviour, correct diagnosis of ovarian tumours is difficult for gynaecologists. A preoperative diagnostic method that can tell if an ovarian tumour is benign or malignant could help with treatment planning and optimization. Bimanual pelvic examination (for size,

shape, consistency, mobility, and tenderness), ultrasonography (transabdominal or transvaginal with or without Doppler), computerised tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), and tumour markers are all used to assess ovarian mass prior to surgery (CA-125, CA-15-3, CA-19-9). CT scans, MRIs, and PET scans are among the more expensive studies, and their availability and affordability cannot be guaranteed, particularly in resource-constrained situations such as developing countries[7]. The sensitivity and specificity of these individual factors varies. Surgical exploration is required for any patient with an ovarian mass larger than 10 cm in diameter. Ovarian cysts of lesser size in the premenopausal age range can be monitored clinically for a few months to see if they resolve. Because there is an elevated risk of cancer in postmenopausal women with complicated ovarian masses larger than 6 cm, surgical exploration is required[8]. Because of the high prevalence and case fatality ratio of ovarian tumours, even in well-equipped hospitals, early identification and treatment are critical. The goal of this study is to look at how patients with ovarian tumours present clinically, histologically, and how they are treated.

AIM AND OBJECTIVE: To investigate how patients with ovarian tumours are treated at a tertiary health care facility.

MATERIAL AND METHODS: The current research was a prospective observational study conducted in a tertiary health care facility. The research was place over a two-year period. All ovarian tumour patients admitted to the obstetrics and gynaecology department were studied. Those patients with solid ovarian masses diagnosed clinically and via ultrasound examination, as well as all patients with cystic ovarian lesions measuring more than 6 cms, were included in the study. Ovarian cysts less than 6 cm in diameter with clear cysts in the reproductive age group are excluded.

The study was authorised by the institute's ethics committee. After explaining the study to patients, they signed a proper written consent form. A pre-tested questionnaire was used to collect data. The data includes socio-demographic information as well as clinical history. A comprehensive clinical examination was performed. All of the patients were subjected to regular pre-surgery tests. Ultrasonographic results and histopathological reports were reported. The levels of tumour markers in suspicious tumours were examined. The results of the surgery were recorded. The treatment was tailored to the specific form of ovarian tumour. The specimen was examined grossly and histopathologically. The preoperative, intraoperative, and postoperative data were all correlated. The effects of an ovarian tumour have been observed. Statistical tests were used to analyse the data.

RESULTS

During the research period, the institute received a total of 2024 gynaecology admissions, 120 of which were for ovarian tumours. As a result, 5.9% of the population was affected.

Table 1: Incidence of ovarian tumours

Total no patients	2024
Total no of patients with Ovarian tumours	120
Incidence of ovarian tumours	5.9 %

The majority of patients with ovarian tumours (33.3 percent) in this study were over the age of 51, followed by those between the ages of 41 and 50. (23.3 percent). The age range of 31-40 years was the least represented (18.3 percent).

Table2: Distribution of ovarian tumour patients according to age group

Age in Years	Cases	Percentage
30	30	25 %
31-40	22	18.3 %
41-50	28	23.3 %
≥ 51	40	33.3 %
Total	**120**	**100**

The most prevalent clinical manifestation in this study was abdominal discomfort (93.3 percent), followed by abdominal mass (83.3 percent). The majority of patients with ovarian tumours had many symptoms. Retention of urine, increased frequency of micturation, and gastrointestional symptoms such as constipation were among the pressure symptoms.

The majority of the cases in this study had unilateral ovarian tumours (63.3 percent). The majority of the 120 individuals with ovarian tumours in this study were benign, with 78 cases (65%) being benign and 42 cases (35%) being malignant. The most common ultrasonographic findings in this investigation were cystic + solid consistency (35 percent), followed by

cystic consistency (35 percent) (33.3 percent). Liver metastases was the least common (3.3 percent). In this study, 38.3 percent of the patients exhibited CA-125 positive tumour markers, while the remaining 61.7 percent had CA-125 negative tumour markers.

Table 3: Distribution of ovarian tumour patients according to histopathologictal type

Type of Tumour	Cases	Percentage
Serous Cyst Adenoma	48	40 %
Mucinous Cyst Adenoma	22	18.3 %
Dermoid Cyst	08	06.7 %
Serous Cyst Adenocarcinoma	12	10 %
Mucinous Cyst Adenocarcinoma	18	15 %
Papillary Serous Cyst Adenocarcinoma	04	03 %
Papillary Mucinous Cyst Adenocarcinoma	06	05 %
Krukenberg Tumour	02	01.7 %
Total	**120**	**100 %**

In our investigation, among the study group of 120 patients, majority of (40 percent) were found to have serous cyst adenoma followed by mucinous cyst adenoma (18.3 percent). (18.3 percent). The most prevalent treatment for ovarian tumours in this study was cystectomy (44.8%), followed by total abdominal hysterectomy (29.3%), and bilateral salphingo oopherectomy (29.3%). The least common procedure was exploratory laparatomy with biopsies (3.4 percent).

Table 4: Distribution of ovarian tumour patients according to management surgery

Operation	Cases	Percentage
Cystectomy	52	44.8 %
TAHBSO	34	29.3 %
SL+ TAHBSO	30	22.4 %
EL+ Biopsy	04	3.4 %
Total	**116**	**100 %**

In this study, 88.3 percent of ovarian cancer patients had no complications. Recurrence occurred in two patients (1.7%), torsion occurred in four patients (3.4%), and four patients (3.4%) died from advanced ovarian neoplasm and disseminated carcinomatosis.

Table 5: Distribution of ovarian tumour patients according to complications

Complication	Cases	Percentage
Torsion of Tumour	04	03.4 %
Recurrence	02	01.7 %
Death	04	03.4 %
No Complication	106	88.3 %
Total	**116**	**100 %**

DISCUSSION

Out of 2024 patents in our investigation, 120 were for ovarian tumours. As a result, 5.9% of the population was affected. Similar findings were found by M Yogambal et al, who found a 5.4 percent ovarian tumour incidence. In a study by Dr. Vaddatti Tejaswini et al, the incidence was 7.02 percent, but it was 2.31 percent in a study by Tarek Ramadan Abbas. Because to the various demographic, study standards, and methodology employed by the investigator, varying incidence was detected in different investigations[9, 10]. In this study, 33.7 percent of ovarian tumours were discovered in people above the age of 51. Ovarian tumours were seen most frequently in the age category of 30 years (32.6 percent) in R Jha et al's study, and in the age group of 31-40 years in Vaddatti Tejeswini et al's study (29.5 percent). In this study, 63.33 percent of the patients had unilateral ovarian tumours, which is similar to RK Mishra's (96.31 percent) and R Jha et alstudies. .'s (87.57 percent). Both studies were comparable to the current investigation. In the current investigation, benign tumours were found in 65 percent

of the cases. According to Kanthikar et al. (2014), benign tumours were detected in 78.57 percent of patients, while malignant tumours were found in 20%. Benjgn tumours were discovered in 75.2 percent of patients in a research by Pilli et al. (2002). Previous research has yielded similar results[11, 12]. The most prevalent clinical presentation in this study was abdominal discomfort, which was seen in 93.33 percent of cases. Sumaira et al (70.59 percent), Tarek Ramadan Abbas et al (66.66 percent), and Kanthikar et al (70.59 percent) have found similar results (29.33 percent). In all trials, only a small percentage of patients suffer pressure symptoms such as urine retention, micturation frequency, and constipation. CA-125, a tumour marker, was found to be positive in all of the malignant ovarian tumours in this investigation. It was equivalent to Habib KA's research. In this study, the most prevalent ovarian tumour found on histopathological investigation was serous cyst adenoma, which was found in 40% of cases. It was comparable to Kanthikar et al research. The most prevalent treatment for ovarian tumours in this study was cystectomy (44.82 percent), followed by total abdominal hysterectomy (29.31 percent), and bilateral salphingo oopherectomy (29.31 percent). The least common procedure was exploratory laparatomy with biopsies (3.44 percent). In our research, 88.33% of ovarian cancer patients had no complications. Recurrence occurred in two individuals (1.66 percent), and tumour torsion occurred in four patients (3.44 percent). Due to advanced ovarian neoplasm and disseminated carcinomatosis, four patients (3.44 percent) with ovarian tumour died. Only young individuals with borderline tumours or endometrioid, mucinous, or serous Stage IA, grade I ovarian cancer can have conservative surgery[13, 14].

CONCLUSION

Cystectomy was the most prevalent treatment for ovarian tumours (44.82 percent), followed by total abdominal hysterectomy and bilateral salphingo oopherectomy (29.31 percent). To summarise, it is critical to recognise ovarian tumours early, and a multipronged approach involving focused risk factor identification and screening with CA-125, as well as additional markers as appropriate, will go a long way toward reaching this goal.

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