

Analysis of Pattern of Care of Operable Endometrial Carcinoma Patients: An Institutional Based Study

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ABSTRACT

Background: Endometrial cancer is the most common gynaecological tumour in developed countries, and its incidence is increasing. The most frequently occurring histological subtype is endometrioid adenocarcinoma. This study was conducted to analyse pattern of care of operable endometrial carcinoma patients.

Materials and Methods: A cohort of 100 patients diagnosed with endometrial cancer and subsequently treated was included in the study. Following surgical staging, each patient underwent a comprehensive evaluation to inform their treatment strategy. Any postoperative complications were meticulously recorded. The results were recorded in Microsoft excel sheet and were subjected to statistical analysis using SPSS software.

Results: The mean age of the patients was 57.7 years. Intraoperative adverse events included ureteric injury and bowel injury found to be present in 2 percent and 3 percent of the patients respectively. Postoperative fever, UTI, Anemia, Hypokalemia and Hyperkalaemia was seen in 7 percent, 2 percent, 21 percent, 6 percent and 3 percent of the patients respectively. Endometrial type was the most common type

encountered in 49 percent of the cases. Disease free survival was seen in 77.3 percent of the cases while overall survival was seen in 79.8 percent of the cases.

Conclusion: Anemia represents the most common complications associated with management of endometrial carcinoma followed by electrolyte disbalance.

Keywords: Endometrial, Cancer.

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INTRODUCTION

Endometrial cancer is the most common gynaecological tumour in developed countries, and its incidence is increasing. The most frequently occurring histological subtype is endometrioid adenocarcinoma. Patients are often diagnosed when the disease is still confined to the uterus. Standard treatment consists of primary hysterectomy and bilateral salpingo-oophorectomy, often using minimally invasive approaches (laparoscopic or robotic). Lymph node surgical strategy is contingent on histological factors (subtype, tumour grade, involvement of lymphovascular space), disease stage (including myometrial invasion), patients' characteristics (age and comorbidities), and national and international guidelines.¹⁻³

Adjuvant treatment is tailored according to histology and stage. Various classifications are used to assess the risks of recurrence and to determine optimum postoperative management. 5-year overall survival ranges from 74% to 91% in patients without metastatic disease. Trials are ongoing in patients at high risk of recurrence (including chemotherapy, chemoradiation therapy, and

molecular targeted therapies) to assess the modalities that best balance optimisation of survival with the lowest adverse effects on quality of life.^{4,5} The incidence of endometrial cancer is highest among relatively affluent Caucasians. Although it has a comparatively low mortality rate compared with other gynaecological cancers, it is capable of aggressive behaviour. Endometrial cancer is uncommon in premenopausal women. The incidence rises with age and is significantly increased when there is exposure to unopposed estrogen, including hormone replacement therapy (HRT). Even when HRT is given in the form of estrogen and cyclical progesterone there is probably some increased risk. The long term use of tamoxifen for breast cancer is also associated with an increased incidence of endometrial cancer. Transvaginal ultrasound and pipelle or hysteroscopy endometrial biopsies are tending to replace the traditional dilation and curettage in establishing a diagnosis.⁶⁻⁸ This study was conducted to analyse pattern of care of operable endometrial carcinoma patients.

MATERIALS AND METHODS

A cohort of 100 patients diagnosed with endometrial cancer and subsequently treated was included in the study. Following surgical staging, each patient underwent a comprehensive evaluation to inform their treatment strategy. The patients were categorized into four risk groups—low-risk, low-intermediate risk, high-intermediate risk, and high-risk—based on the criteria established in the Postoperative Radiation Therapy in Endometrial Carcinoma trial.⁷ The identification of cases was conducted through the operation theatre records. A thorough review of the medical records for these patients was performed, documenting demographic and clinical information. This documentation encompassed aspects such as diagnosis, staging specifics, details regarding surgeries performed at external facilities, procedures conducted at the center, postoperative complications, adjuvant therapies, disease status, sites of recurrence, as well as the dates of disease progression and mortality. Additionally, any postoperative complications were meticulously recorded. The results were recorded in Microsoft excel sheet and were subjected to statistical analysis using SPSS software.

RESULTS

The mean age of the patients was 57.7 years. Intraoperative adverse events included ureteric injury and bowel injury found to be present in 2 percent and 3 percent of the patients respectively. Postoperative fever, UTI, Anemia, Hypokalemia and Hyperkalemia was seen in 7 percent, 2 percent, 21 percent, 6 percent and 3 percent of the patients respectively. Endometrial type was the most common type encountered in 49 percent of the cases. Disease free survival was seen in 77.3 percent of the cases while overall survival was seen in 79.8 percent of the cases.

Table 1: Intraoperative and postoperative events

Variable	Number	Percentage
Intraoperative adverse events		
Ureteric injury	2	2
Bowel injury	3	3
Postoperative injury		
Postoperative fever	7	7
UTI	2	2
Anemia	21	21
Hypokalemia	6	6
Hyperkalemia	3	3

Table 2: Type of pathology

Pathology	Number	Percentage
Clear type	23	23
Serous type	21	21
Endometrioid type	49	49
Others	7	7

Table 3: Outcome details

Outcome details	Mean
Disease free survival	
Median	2 years
3 years	77.3 %
Overall survival	
Median	3.6 years
3 years	79.8 %

DISCUSSION

Transvaginal ultrasound and endometrial biopsies performed via pipelle or hysteroscopy are increasingly supplanting traditional dilation and curettage methods for diagnostic purposes. Approximately 90% of endometrial tumors are amenable to surgical resection at the time of diagnosis, with total abdominal hysterectomy and bilateral salpingo-oophorectomy remaining the primary treatment approach. Key prognostic indicators include histological grade, the extent of myometrial invasion, the presence of lymph-vascular space invasion, involvement of regional lymph nodes, tumor size, and cervical involvement. The pelvic region is particularly susceptible to recurrence and given the limited efficacy of cytotoxic chemotherapy and hormonal treatments, radiotherapy is preferred as an adjunctive therapy when adverse prognostic factors are identified. There is a trend towards more extensive surgical interventions, such as incorporating lymphadenectomy alongside total abdominal hysterectomy and bilateral salpingo-oophorectomy, which may influence the role of adjuvant therapies and underscores the necessity of clarifying the position of postoperative radiotherapy in the treatment of endometrial cancer.⁷⁻¹⁰ This study was conducted to analyse pattern of care of operable endometrial carcinoma patients.

The mean age of the patients was 57.7 years. Intraoperative adverse events included ureteric injury and bowel injury found to be present in 2 percent and 3 percent of the patients respectively. Postoperative fever, UTI, Anemia, Hypokalemia and Hyperkalemia was seen in 7 percent, 2 percent, 21 percent, 6 percent and 3 percent of the patients respectively. Endometrial type was the most common type encountered in 49 percent of the cases. Disease free survival was seen in 77.3 percent of the cases while overall survival was seen in 79.8 percent of the cases. Dessai SB et al conducted a comprehensive evaluation of the demographics, staging, treatment modalities, and outcomes associated with operable endometrial cancers. The study included 55 patients, with a median age of 59 years, ranging from 35 to 73 years. The performance status, as classified by the Eastern Cooperative Oncology Group, indicated that 52 patients (94.5%) had a status of 1, while 3 patients (5.5%) were classified as status 2. Among the cohort, 49 patients (89.1%) presented with disease confined to the endometrium, whereas 6 patients (10.9%) exhibited cervical involvement. Surgical interventions comprised Type I hysterectomy in 49 patients (89.1%), Type II in 5 patients (9.1%), and Type III in 1 patient (1.8%). All patients underwent pelvic lymph node dissection, and para-aortic (infrahilar) dissection was performed in 48 patients (87.3%). Pathological staging revealed Stage IA in 19 patients, Stage IB in 15 patients, Stage II in 4 patients, Stage IIIA in 3 patients, Stage IIIB in 2 patients, Stage IIIC1 in 5 patients, Stage IIIC2 in 4 patients, and Stage IV in 3 patients. Tumor grading indicated Grade 1 in 23 patients, Grade 2 in 13 patients, and Grade 3 in 19 patients. Histological analysis showed endometrioid type in 44 patients, serous type in 6 patients, clear cell type in 3 patients, and other types in 2 patients. Additionally, 40 patients received adjuvant treatment.¹⁰ Ma SK et al. conducted a comprehensive study on the clinical and pathological features, treatment approaches, and prognostic outcomes associated with synchronous primary malignancies of the endometrium and ovary. Surgical interventions included total hysterectomy with bilateral salpingo-oophorectomy, omentectomy, and appendectomy for 31 patients,

while 12 underwent pelvic lymph node dissection. Pathological analysis confirmed endometrial adenocarcinoma in 38 of the 43 patients (88.4%). The most frequently observed ovarian histology was endometrioid or mixed tumors containing endometrioid components, found in 30 out of 43 cases (69.8%). Post-surgery, 26 patients (60.5%) received adjuvant chemotherapy alone, 12 were treated with a combination of chemotherapy and radiotherapy, one patient received radiation therapy alone, and four patients did not receive any adjuvant treatment. The survival rates at three and five years for the cohort were 87.4% and 71.1%, respectively. Patients diagnosed with both endometrioid and ovarian carcinomas exhibited higher survival rates compared to those with non-endometrioid or mixed subtypes. Furthermore, patients with early-stage disease demonstrated superior three-year and five-year survival rates compared to their counterparts with more advanced disease.¹¹

CONCLUSION

Anemia represents the most common complications associated with management of endometrial carcinoma followed by electrolyte disbalance.

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