



Perioperative Morbidity of Endometrial Cancer: A Main Research Article

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Abstract

Purpose of the study: *This study was undertaken to evaluate the perioperative morbidity in women undergoing surgery for carcinoma endometrium in a tertiary hospital in South India for a period of 5 years (2007-2012).*

Design: *It is retrospective study.*

Setting: *This study was revive of medical records in the Department of Obstetrics and Gynaecology in collaboration with the Department of medical record section, JIPMER, Pondicherry, India, from January 2007 to December 2012.*

Population: *The subjects included 121 women who underwent surgery for carcinoma endometrium during the study period..*

Materials and Methods: *The medical records of all patients who underwent surgery for carcinoma endometrium were revived. Stage of the disease, surgery performed, co-existing risk factors like diabetes, hypertension and obesity, prophylactic antibiotics, intra operative and postoperative studied.*

Main outcome measures: *Out of the 121 women who underwent surgery for endometrial carcinoma, majority 47 (39%) of them were in the age group of 51-60 years. Majority of women (94%) presented with postmenopausal bleeding. All 121 patients underwent extrafascial hysterectomy and bilateral salpingoopherectomy. Surgicopathological staging showed majority early stage. Mean duration of hospitalization was 14 days and 66 patients received postoperative radiotherapy.*

Results: *Surgery appears to be a safe option for carcinoma endometrium with minimal perioperative morbidity.*

Conclusion: *A multidisciplinary team of surgical / medical oncologist, gynecologist and radiotherapist is needed to optimize outcome.*

Keywords: *Carcinoma endometrium, morbidity of Ca endometrium, extrafascial hysterectomy, surgicopathological staging of ca endometrium, bilateral salpingoopherectomy.*

Introduction

Endometrial cancer is the most common malignancy of the female genital tract in developed countries and second to cervical cancer in India¹. Endometrial cancer is common in western women, and the rates are very high; however in India, the rates are as low as 4.3 per 100,000.² The estimated incidence is 15–20 per 100,000 women per year. Sporadic cases account for 90% of endometrial carcinoma, while the remaining 10% arise from a genetic background. Endometrial cancer predominately affects post menopausal women; however 15-25% of cases are diagnosed before menopause. The lifetime risk of endometrial cancer is 2.6% with median age of diagnosis at 65 years. Endometrial cancer is not amenable to screening, hence needs to be managed effectively as soon as diagnosis is made. Though quite a lot of studies have been conducted in this area, still there are controversies regarding few issues in its management.

Prognosis depends on the histological subtype, depth of invasion into myometrium and lymph node involvement.³⁻⁷ Owing to the fact that almost 75% of cases are diagnosed before extra uterine spread of disease, endometrial cancer is considered as a 'curable cancer'. The overall 5-year survival rate is very good when the disease is confined to the uterus.

Surgery remains the gold standard of treatment for this cancer. The aim of this article was to review the perioperative morbidity in endometrial cancer patients who received surgery as the primary mode of treatment in south India tertiary care hospital.

Aims and Objectives

To study the peri-operative morbidity in women undergoing surgery for carcinoma endometrium in a tertiary hospital in South India for a period of 5 years (2007-2012).

Methods

It is a retrospective review of case records from medical record section from January 2017 to

December 2012 in tertiary care hospital south India. There were 121 women who underwent surgery for carcinoma endometrium during the study period.

Type of study: It is a single group retrospective study.

Inclusion criteria

Those who underwent surgery as primary mode of treatment for carcinoma endometrium in desired study period.

Exclusion criteria

All carcinoma endometrium patients who have received other modality of treatment as primary treatment.

Parameters studied

Stage of the disease, surgery performed, co-existing risk factors like diabetes, hypertension and obesity, prophylactic antibiotics, intra operative details such as blood loss, duration of surgery, need for blood transfusion and immediate postoperative details like continuous bladder drainage, requirement of antibiotics, febrile morbidity, urinary tract infection, wound break down and number of days of hospitalization.

For statistical calculation Microsoft excel, SPSS and graph pad were used.

Results

Out of the 121 women who underwent surgery for endometrial carcinoma, majority 47 (39%) of them were in the age group of 51-60 years with minimum age 33 years and maximum age 70 years with mean age 56.32 years. Among 121 subjects 113(93%) postmenopausal women. Majority 97(80%) subjects were multiparous. One subject was unmarried. Majority of women (94%) presented with postmenopausal bleeding while the others had abnormal uterine bleeding.

Eighty three patients had medical risk factors for carcinoma endometrium such as diabetes, obesity, hypertension in varying combinations or alone.

All 121 patients underwent extrafascial hysterectomy and bilateral salpingo-oophorectomy. In addition lymph node dissection was carried out in 6 women and 15 had omental biopsy in

suspicion of higher stage of the disease. For 1 patient partial vulvectomy and 1 suboptimal debulking done.

Surgicopathological staging

Fifty three patients were in stage 1A, 32 were 1B, 12 were stage 2, 13 were stage 3 and 1 patient was stage 4 who had received preoperative radiation (table-1).

Table-1 Stage wise distribution of subjects after Histopathology report.

Stage	Subjects	Percentage
1AG1	44	36.36
1AG2	7	5.79
1AG3	6	4.96
1BG1	19	15.70
1BG2	4	3.31
1BG3	8	6.61
2G1	4	3.31
2G2	3	2.48
2G3	3	2.48
3AG1	2	1.65
3AG2	5	4.13
3AG3	1	0.83
3BG1	2	1.65
3BG2	2	1.65
3BG3	1	0.83
3C1G3	1	0.83
3C2G1	2	1.65
3C2G2	1	0.83
3C2G3	1	0.83
4AG3	1	0.83
4B	1	0.83
Atypical hyperplasia	1	0.83

Histopathological report of all subjects detailed in table-2.

Table -2 Histopathological examination reports

HPE/variants	Total	Percentage
Endometrioid adeno ca	111	91.74
Mucinous ca	0	0
Serous ca	5	4.13
Clear cell ca	1	0.83
squamous cell ca	0	0
mixed cell ca	2	1.65
Undifferentiated	0	0
complex atypical hyperplasia	1	0.83
Leiomyosarcoma	1	0.83

All patients were given prophylactic antibiotics just before the procedure. Mean blood loss was 245 ml, mean duration of surgery was 120 minutes and 52 patients required blood transfusion. Mean duration of catheterization was 1 day and antibiotics were continued for 5-7 days. There were 53 patients with febrile morbidity which spontaneously resolved and 15 had urinary tract infection, the most common organism being E Coli. Ten patients had wound gaping and 1 had burst abdomen. Out of the patients with wound breakdown one showed growth of E.coli and two others were positive for MRSA. Mean duration of hospitalization was 14 days in patients with uneventful postoperative course and was up to 33 days in patients with wound infection. Sixty six patients received postoperative radiotherapy.

Discussion

Surgical approach and accurate staging is the gold standard therapy in the primary management of patients with endometrial cancer.⁸ Surgical treatment for stage 1 endometrial cancer includes peritoneal cytology sample, total hysterectomy, bilateral adnexectomy and pelvic (at least 15 lymph nodes) lymphadenectomy up to the renal vessels. The similar protocols had been followed in our subjects wherever applicable.

More extensive parametrial resection (radical hysterectomy) does not improve the oncologic outcome in patients with stage 1 endometrial cancer.⁹ The resected uterus should be examined intra-operatively, with or without frozen section, to assess the extent of the tumor.

Definitive histologic grade, myometrial invasion and lymph node involvement may differ substantially from intra-operative gross assessment and frozen section results.⁹⁻¹²

Conclusion

Surgery appears to be a safe option for carcinoma endometrium with minimal perioperative morbidity. A multidisciplinary team of surgical / medical oncologist, gynecologist and radiotherapist is needed to optimize outcome.

Limitations

Possibility missing data is limitation Since the study was case records review of retrospective study.

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Disclosure of interests

The authors have no conflict of interests to declare.

Author contributions

Dr. Hanumant V Nipanal: Manuscript preparation, data collection and analysis

Dr. S Susmitha: Manuscript preparation.

Dr. Ravindra P N: Statistical analysis.

Dr . Basavaraj Padara: Manuscript preparation.

Details of ethics approval

This study has been approved by Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India-605006, research committee and institute ethics sub-committee (human studies).

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