

Clinical Profile Of Patients With Carcinoma Cervix In A Tertiary Care Hospital

Sanaulah K

Professor & Head, Department of Radiation Oncology,
Government Medical College, Srinagar J&K

Owais A

Dar Abdul waheed

Sajad D

Senior Resident, Department of Radiation Oncology,
Government Medical College, Srinagar J&K

Abstract: Cervical cancer is the third most common malignancy in women worldwide, accounting for 9 % of the total new female cancer cases. Primary treatment selection is guided by tumor stage. For those who are diagnosed at the locally advanced stage, concurrent chemo-radiotherapy (CCRT) is currently the standard care. Histological and quantitative pathological prognostic factors in cervical carcinoma include age, tumour size, stage of disease, tumour grade, histological type, performance status, lymph-vascular space involvement, endometrial extensions, peritoneal cytology have been shown to affect therapeutic outcome. Present study was designed to look for clinical profile of patients with carcinoma cervix presented in our department.

I. INTRODUCTION

Cervical cancer is the third most common malignancy in women worldwide, accounting for 9 % of the total new female cancer cases. A large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers with an estimated 528,000 new cases diagnosed annually. Cervical cancer is the second most common cancer in India accounting for 22.86% of all cancer cases in women and 12% of all cancer cases in both men and women. It is third largest cause of cancer mortality in India accounting for nearly 10% of all cancer related deaths in the country. About 1,23,000 new cases and 67,500 Deaths are registered annually. Common median age is 38 years (age 21–67 years). The relative five year survival averages to 48.7%. The survival chance of a person becomes better if the cervical cancer is diagnosed and treated at earlier stages. Therefore it is important to avail of cervical cancer screening.

Primary treatment selection is guided by tumor stage. For those who are diagnosed at the locally advanced stage, concurrent chemo-radiotherapy (CCRT) is currently the standard care, as ineffective treatment is associated with

increased toxicity and morbidity, accelerated tumor growth, a delay in commencing alternative, potentially effective treatment, and unnecessary expense. Radiotherapy (RT) plays a major role in the treatment of invasive uterine cervical carcinoma. Early invasive tumors are managed with either radical surgery or RT. Locally advanced tumors are treated with RT with or without chemotherapy. Optimal treatment results require a combination of dedicated planned external beam RT (EBRT) and intracavitary brachytherapy (ICRT). The curative potential of RT in the management of carcinoma of the cervix is greatly enhanced by the use of ICRT. The term “brachytherapy” (BT) refers to a strategy of implanting sealed radioactive sources either in close proximity to or in contact with the target tissue. The success of brachytherapy may be attributed to the delivery of a high radiation dose to the tumour while sparing the surrounding normal tissues. Brachytherapy is the only demonstrated method of providing the high dose required to control cervical cancer (80 Gray [Gy]), without causing undue side effects.

AIM

Present study was designed to look for clinical profile of

patients with carcinoma cervix presented in our department.

II. MATERIAL AND METHODS

The study was done in Department of Radiation Oncology. All the patients included in this study were histologically proven cases of cancer cervix taken from our OPD. Fifty patients of cancer cervix were enrolled into this study.

INCLUSION CRITERIA

- ✓ Biopsy proven cancer cervix
- ✓ Age \geq 18 years
- ✓ Karnofsky performance scale above 70
- ✓ Stage IB₁ to IIB
- ✓ No history of previous malignancy
- ✓ Hepatic, Renal, and Cardiopulmonary functions are adequate

EXCLUSION CRITERIA

- ✓ Carcinoma of the cervix FIGO stage IV patients
- ✓ Metastatic disease
- ✓ Any previous pelvic surgery, radiotherapy or chemotherapy

III. RESULT

In this study mean average age of the patients was 48 years (30-67 years) and the most common age group was 41-50. Most of the women were post menopausal and multiparus. Most common symptoms seen are bleeding p/v, whitish discharge, pain in abdomen, and pain in lumbo sacral area, unexplained weight loss. There was no symptoms of rectal bleeding, hematuria are seen in any patients. There is no any significant relationship seen between in co morbid conditions like hypertension, Diabetes mellitus and Tuberculosis. Most common FIGO stage seen is IIB. All patient had same histopathology squamous cell carcinoma. (Results summarized in table1-2)

PATIENT CHARACTERISTIC	NO.OF PATIENTS
Age	No. of Patients (%)
21-30	0(0)
31-40	9(36)
41-50	23(92)
51-60	11(44)
61-70	7(28)
Menstrual Status	No. of Patients (%)
Post menopausal	26(104)
Peri menopausal	12(48)
Pre menopausal	12(48)
Parity (No.Of Children)	No. of Patients (%)
Nulliparus	0(0)
2-3	17(68)
4-6	24(96)

7-8	9(36)
Chief Complaints	No. of Patients (%)
Bleeding	32(64)
Whitish /yellowish discharge	40(80)
Pain in lower abdomen	24(48)
Back pain	18(36)
Weight loss	4(8)
Inter menstrual bleeding	12(24)
Prominent menstrual bleeding	3(6)
Post coital spotting	4(8)
Co morbid conditions	No. of Patients (%)
Hypertension	4(8%)
Diabetes mellitus	2(4%)
Tuberculosis	2(4%)
Staging	No. of Patients (%)
IA	0(0)
IB	2(4)
IIA	13(26)
IIB	22(44)
IIIA	2(4)
IIIB	11(22)
IVA	0(0)
Histopathology	No. of Patients (%)
Squamous	50(100)
Keratinization status	No. of Patients (%)
Keratinization	11(44)
Non -Keratinization	5(20)
No Comments	34(136)
Grading	No. of Patients (%)
Poorly Differentiated	2(8)
Moderately Differentiated	28(56)
No Comments	12(24)
Failures	No. of Patients
Pelvic failure	9
Distant metastasis	0
Response	No. of Patients
CR	41
PR	8
SD	0
PD	1

Table 1: Patient Characteristics

TREATMENT CHARACTERISTICS	NO OF PATIENTS
RT Duration(days)	56
No. of ICRT	3
Total EBRT dose	50
ICRT point A dose	21
Total point A dose	71
Total point A BED	146.3
Total rectal dose	56.63
Total rectal BED	117.11
Total bladder dose	64.11
Total bladder BED	107.16

Table 2: Treatment Characteristics

IV. DISCUSSION

Histological and quantitative pathological prognostic factors in cervical carcinoma include age, tumour size, stage of disease, tumour grade, histological type, performance status, lymph-vascular space involvement, endometrial extensions, peritoneal cytology have been shown to affect therapeutic outcome.

A variety of technical factors has been found to influence the morbidity of radiation therapy in patients treated for carcinoma of the uterine cervix. Among these are the dose of irradiation, quality of the intracavitary insertion, type of application used and proportion of external beam or brachytherapy dose delivered. Host-related factors, such as the age of the patient, the presence of diabetes mellitus, hypertension, pelvic inflammatory disease and a history of prior surgery have been reported to affect the incidence of complications.

In this study, age of the patients ranged between 30 to 67 years and average age was 48 years. Majority of the patients studied were postmenopausal (52%). Most of the patients in the study group were multiparous (66% of patients had four or more children. Symptom assessment during the initial presentation shows that yellowish or whitish discharge per vagina (80%), post menopausal bleeding (64%), pain in hypogastrium (48%), back pain (36%), intermenstrual bleeding (26%) and unexplained weight loss (8%) were the predominant symptoms. Two patient in each group presented with post coital bleeding. None of the patients complaint about rectal bleeding or hematuria. 12% of patients had co-morbid condition in form of Diabetes Mellitus or Hypertension. All the patients were of squamous cell carcinoma, among which moderately differentiated grade was the commonest (around 56%). Around half of the patients (44%) had stage IIB diagnosis and next common stage was stage IIA (26%) followed by stage IIIB (22%). Stage IB was seen in a very small percentage (4%). The over-all treatment duration has been reported by several authors to be of prognostic significance in patients with cervical cancer treated by radiation therapy.

The American Brachytherapy Society recommends keeping the total treatment duration to less than 8 weeks, because prolongation of total treatment duration can adversely affect local control and survival. 10 In our study treatment time was well within span of eight weeks.

In previous years, different studies have shown that HDR brachytherapy with concomitant chemo-radiotherapy is safe and effective in management of locally advanced cervical cancer. Patel et al (1994) studied 412 patients diagnosed with stage III cancer of the cervix treated with EBRT. Patients were randomized to receive either 18 Gy in 2 fraction of 9 Gy each or 35 Gy by continued low dose rate BT. The 5 years survival, local control and distant failure were not significantly different and there was no evidence of increased toxicity in HDR group.

In the present study, all the patients of both groups were under follow up till six months. There was complete response in 92% and 84% patients of group A and B respectively. These patients did not show any local or regional recurrence during the follow up of 6 months. Therefore, there was no significant difference seen in the local disease free survivals.

Though we have delivered high dose to point A in group B, long term follow up will dictate whether it will be helpful to have better local control or not.

V. CONCLUSION

Cervical cancers are preventable with excellent treatment outcome. Most of the women were post menopausal and multiparous with the most common age group was 41-50 Most common symptoms seen are bleeding p/v, whitish discharge and pain in abdomen. Most common FIGO stage seen is IIB with histopathology squamous cell carcinoma. Public health education in a well organized manner among the people of high risk group such as people with early marriage, having low socio economic status, different sexual behavior, poor genital hygiene and mass screening can substantially reduce the morbidity and mortality associated with cervical carcinomas. Further to mention vaccination against HPV needs to be brought under national immunization schedule.

REFERENCES

- [1] Li Zhu, Lijing Zhu, Hua Shi, Huanhuan W. Evaluating early response of cervical cancer under concurrent chemo-radiotherapy by intravoxel incoherent motion MR imaging. *BMC Cancer* 2016;16:79.
- [2] Ferlay J, Soerjomataram I, Ervik M, et al. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11. Lyon, France: International Agency for Research on Cancer; 2013. GLOBOCAN 2012 (IARC).
- [3] Sankaranarayanan R, Black RJ, Parkin DM. Cancer survival in developing countries, IARC Scientific Publication No. 145. Lyon: International Agency for Research on Cancer; 1998. Source: National Cancer Registry Programme.
- [4] Kirwan JM, Symonds P, Green JA, Tierney J, Collingwood M, Williams CJ. A systematic review of acute and late toxicity of concomitant chemoradiation for cervical cancer. *Radiation Oncology* 2003;68(3):217-26.
- [5] Alain G, Richard P, Christine HM. GEC Estro Handbook of Brachytherapy, Chapter 14. 301-62.
- [6] Green JA, Kirwan JM, Tierney JF. Survival and recurrence after concomitant chemotherapy and radiotherapy for cancer of the uterine cervix: A systematic review and meta-analysis. *Lancet* 2001;358(9284):781-86.
- [7] Anderson MC. Premalignant and malignant squamous lesions of the cervix. In: Fox H, Wells M, eds. Haines & Taylor. *Obstetrical and Gynaecological Pathology*. 4th edn. Churchill Livingstone, New York, 1995: 273-322.
- [8] Stehman FB, Bundy BN, Disaia PJ., Key HM, Larson JE., and Fowler WC, Carcinoma of Cervix Treatment with Radiation Therapy: a Multivariate Analysis of Prognostic Variables in the GOG Study, *Cancer* 97 (11), 1991, pp 2776-2785.
- [9] Grinsky T, Rey A, Roche B, Haie C, Gerbaulet A, Randrianarivello H, and Chassagne D., Overall treatment

time in advanced cervical carcinoma: A critical parameter in treatment outcome: International Journal Radiation Oncology Biol. Phys. 27, 1994, pp 1051-1056.

[10]Nori D, Dasari N, and Allbright RM, Gynaecologic Brachytherapy I: Proper Incorporation of Brachytherapy into the Current Multimodality Management of

Carcinoma of the Cervix, Seminars in Radiation Oncology, Vol. 12, No. 1 (January), 2002: pp 40-52.

[11]Patel FD, Shama SC, Negi PS, Ghoshal S, and Gupta BD, LDR versus HDR Brachytherapy in the Treatment of Carcinoma of the Uterine Cervix: A Clinical Trial, Intern Journ Radiat Oncol Biol. Phys. Vol. 28 No. 2, 1994, pp 335-341

IJIRAS