

Survival Rate after Radiotherapy in Cervical Cancer Patients

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ABSTRACT: The present work was conducted in the Oncology Ward, Allied Hospital, Faisalabad (Pakistan). A total of 150 patients were included to study the survival percentage in different stages of cervical cancer. It was found that in stage II, the survival percentage was 80%. And in this stage, 50 patients were examined and were included. Similarly stage III showed 53% survival rate. But the stage IV exhibited a small percentage i.e. 35%. It is clear from this study that the application of radiation is more responsive in early stage as compared to stage III and IV. As in this study, the survival rate was much decreased in stage IV. Some other researchers have worked on the same aspects and have found similar results.

Keywords: Cervical cancer, radiotherapy

I. INTRODUCTION

The cervical cancer is the reproductive organ cancers. As this disease found in women and usually arises from the lower segment of uterus. The Human Papillomavirus (HPV) has been recognized as the central source (Etiology) of this disease by several studies (Walboomers et al, 1999, Parkin et al, 2005). Although it is mostly transmitted sexually (Bosch et al, 2002), but, it can also be transmitted during direct skin to skin contact of the genital areas (WHO, 2007). Cervical cancer is measured as one of the most avoidable cancers. The purpose of the reason of cervical cancer, its un-hurried development joined with the expansion of the first prophylactic vaccine, makes it the most avoidable cancer and one that can even be eradicated. In spite of this fact, significant death rates are being recorded, mostly in developing countries (Qiao, 2010). There is a ample inconsistency in death and morbidity rates among developed and developing countries. The gaps have been widening in current decades as screening and efficient defensive strategies have led to a striking turn down in the occurrence and death rates in developed countries. For example, in US (United State), between 1955 to 1992, the death rate for cervical cancer reduced to nearly seventy percent and the rates have continued to drop by three percent yearly. Similarly, in UK (United Kingdom), the rates of cervical cancer were decreased by seventy percent in 2008 compared to rates 30 years ago (CCA, 2011).

The majority in the repeated cases of cervical cancer are diagnosed within two years after the radiotherapy. The late re-appearance after a re-currence free interval of more than five years exhibits very rare (Wakatsuki et al, 2015), although the genuine incidence is mysterious because of the complexity of long term follow-up of all the affected patients. Thus, the researchers performed a short-term follow-up revise to assess the prospects of re-appearance over 2 years after radiotherapy. In the stage II, cancer has spread on the outside of the uterus to nearby tissue, but has not reached up to the lower third of the pelvic side walls or vagina. Five-year survival is very lowest as compared to 2- years. Common treatment for stage II cervical cancer includes radiation, surgery & chemo-therapy. Stage III cervical cancer pointed out that the cancer has highly developed beyond the parameters for stage II or has caused changes in the kidney. On an usual, the two years survival rate for all the three stages was 80%, 55% and 35% respectively. Common treatments include chemotherapy and radiation. Similarly, stage IV is the last stage of cervical cancer. In this stage the cancer has left the pelvis and affected more far-away organs. The five-year survival rate is very low i.e. 15 to 20 percent. Types of treatment include radiation & chemotherapy. (Ries et al, 2006)

II. MATERIALS/METHOD

The review of the medical report of stage II to IVA patients treated with radiotherapy for pathologically proven cervical cancer. A total of 150 patients were examined for the above mentioned stages. Among these 150 patients, 50 patients were of stage II, 45 patients were of stage III and 55 of stage IV (staging

according to the International Federation of Gynecology and Obstetrics). All the above said patients were treated with RT as well as chemotherapy. The median age of the patients was 53 years (40-65 years). The term of recurrence was defined as the patients developing limited or far-away failure after a recurrence-free interval of more than 2 years

The patients were treated and followed up at Oncology ward, Punjab Medical College (PMC), Allied Hospital, Faisalabad (Pakistan). This was chosen as the study site because it is the only referral hospital that has an oncology ward and that provides radiotherapy and chemotherapy treatments for cancer patients in Faisalabad division. Since many years, this oncology ward is serving the native cities as well as countryside areas in this division of Pakistan. The participants of this study were inpatients and outpatients of cervical cancer that were attending care at this ward. All clinically diagnosed, consequently established, willing and bodily able participants were incorporated in the study. A total of one fifty (150) diagnosed with cervical cancer were included.

III. RESULTS AND DISCUSSION

The study for 2-years life expectancy was carried out in oncology department, Allied Hospital, Faisalabad. Total number of patients were 150 out of which 50 patients were of stage II, 45 of stage III and 55 patients of stage IV. Out of all the patients studied, total of 40 patients in stage 2 showed a 2 years survival rate, exhibiting 80% survival. Similarly, in stage III, Out of 45, only 24 patients survived, showing a survival percentage of 53 percent. The last stage was considered as fourth (IV) stage in which the data from 55 patients was recorded and it was noted that only 19 patients could survive, having survival percentage of 35% which is the least among the above mentioned stages (Table.1)

Stage II and III are comparatively easy to control as compared to IV. As in this study, maximum survival percentage was shown in stage II, While stage IV showed a minimum survival expectancy i.e. only 35%. As the initial symptoms of cervical cancer are intermenstrual, postcoital bleeding, postmenopausal bleeding etc. The women especially from countryside showed a non-serious behavior while visiting a medical practitioner. Therefore, getting a late medical checkup can lead towards the advanced stages of cervical cancer ultimately leading to reduced survival percentage. Some other researchers have worked on the same aspect and found the similar results regarding the cervical cancer stages and survival percentage. Sheu et al, 2001 also investigated the survival percentage in different stages and found a significant findings among the stage II, III and IV. These results are in agreement with Landoni et al, 1997, Mundt et al, 2002 and Lowrey et al, 1992.

Table: 1 Number of Patients with Life Expectancy

Stage	Number of Patients	2-Years Survival	Percentage
II	50	40	80%
III	45	24	53%
IV	55	19	35%

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