

An Analysis of Patients Experience Undergoing Chemoradiation at a Single Regional Cancer Centre

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Abstract:

Introduction: Chemoradiation (CRT) is an integral part of management of advanced stage solid tumors. Though effective, chemoradiation treatment has its own side effects.

Aims & Objective: To analyse the experience of patients undergoing chemoradiation treatment at our centre.

Material & Methods: 200 post-CRT patients were interviewed using a set of questionnaire regarding their experience during treatment, side effects felt and supportive care received during treatment. Results were analysed using SPSS software version 20.

Results: M:F was 3:1. Mean age group involved was 49 years. 94.5% of the patients had prior information of the various do's and don't's during treatment and regarding the possible side effects of the treatment, 97% patients were satisfied with the supportive care given to them during treatment. Common side effects experienced and reported during treatment were mucositis, vomitings and dry mouth, besides other less common side effects.

Conclusion: Patients undergoing chemoradiotherapy had fair knowledge of the precautions and possible side effects of treatment and were quite satisfied with the supportive care given during treatment.

Keywords: Chemoradiotherapy, cancer.

I. Introduction

Cancer is amongst the most common cause of mortality and morbidity worldwide. In developing countries, it is the second most common cause of mortality and morbidity [1]. Approximately 13% of all deaths each year is attributed to be caused by cancer [2]. The incidence of cancer is rising worldwide and is a reason for concern. Radiation treatment forms an integral part of multimodality approach used in the management of cancer patients besides chemotherapy, hormonal therapy and immunotherapy [3]. Chemotherapy is used in oncology to prevent recurrences of disease or to achieve palliation in advanced disease, and is also used concurrently with radiation therapy to kill the cancer cells synergistically. Chemoradiation is generally used in advanced stages of patient and since most of the patients in our setup presents in advanced stage, chemoradiation and palliative care is an important part of management. Poverty, lack of knowledge of cancer awareness, inadequate number of oncologist and inadequate treatment facilities are some of the reasons for late presentation of the disease in patients of developing countries. Toxicities are unwanted side effects of radiation and chemotherapy treatment. The side effects are enhanced when chemotherapy is combined with radiation treatment and quality of life is also reported in a number of studies to get affected in many patients undergoing chemoradiation [4-6]. Both acute as well as late effects are identified including pain, nausea, vomiting, skin reactions, oral complications [7-9]. Acute reactions are generally seen starting from 2nd week of therapy and continues till completion of treatment [10]. Since most of the patients undergoing cancer treatment suffer from untoward side effects of the treatment we tried to study and analyse their experience of chemoradiation treatment in our setup.

II. Material & Methods

200 post chemoradiated patients, after obtaining their informed consent were interviewed face to face using self-designed set of questionnaire. The questionnaire consisted of 3 sections, section A consisted of questions on demographic profile, section B comprised of questions on information whether various do's and don't's were explained to patients before commencement of the treatment or not and section C comprising of questions on their experience of supportive care received and side effects felt during treatment. The information was noted and statistically analysed using SPSS software version 20.

III. Results

Table1-Age distribution among patients (n=200).

Age	Frequency	Percentage
25-35	27	13.5
36-45	40	20
46-55	67	33.5
56-66	59	29.5
67-76	07	03.5
Total	200	100

Table 2-KPS (Kernofsky performance scale) of patients (n=200).

KPS	Frequency	Percentage
50	09	04.5
60	46	23
70	73	36.5
80	54	27
90	18	09
Total	200	100

Table3-Whether information regarding do's and don't's and possible side effects received before therapy.

Information received	Frequency	Percentage
Yes	189	94.5
No	11	5.5
Total	200	100

Table 4-Whether satisfactory supportive care received during treatment (n=200).

Care received	Frequency	Percentage
Yes	194	97
No	06	03
Total	200	100

Table 5-Side effects experienced during treatment (n=200).

Symptom	Frequency	Percentage
Mouth ulcer	66	33
Skin ulcer	20	10
Pain	18	09
Nausea	08	04
Vomiting	31	15.5
Loose stool	08	04
Constipation	03	01.5
Dryness of mouth	22	11.0
Hair Loss	07	03.5
Loss of appetite	09	04.5
Fatigue	08	04
Total	200	100

IV. Discussion

In our study breast cancer, cervix cancer and head and neck malignancy were the most common amongst the patients who took treatment. These 3 malignancies constituted almost 71% of the total malignancy cases treated during study, while rests remaining were 29%. Male: Female was 3:1 amongst the analysed patients. Mean age group studied was 49 years (Table-1). Most patients analysed had presented in advanced stage of the disease and majority had a KPS of 70 (Table-2). Majority presented at first visit in advanced stages as stated in a review by Campbell et al [10] while late presentation in stages III and IV as reported by Ketiku et al [11] was 66%. Most of the patients (94.5%) analysed in our study had the information on various do's and don't's during treatment (Table-3), which might have helped them in coping up with the various side effects of the treatment. 60 women receiving chemotherapy were studied by Tierney A.T. et al [12] and it was found that majority of the patients had limited knowledge about side effects of the treatment. In an another study [13] it was found that patient experienced more side effects than what they have been warned to expect, this is in contrast to what was found in our study, probably because in our study patient had prior information of the various do's and don't's to be taken to avoid the side effects. It is believed that most patients cope well with side effects of the chemotherapy [14] and radiation treatment, if properly counselled. Also weekly review during treatment helped in making a better bondage with the patients and majority of the patients were satisfied with the supportive care received during treatment (Table-4). Similar findings were observed in a study done by Adenipukanet.al, in which knowledge and experience of cancer patients was studied in patients who took chemotherapy alone. In our

analysis, most of the patients experienced mucositis 33 % (66) and dry mouth 11% (22) as a prominent side effect during treatment, vomiting was reported in almost 17.5% (35) patients while skin ulceration was reported by 10% (20) of patients (Table-5). In a study done by Gulsum Nihal Guleser it was concluded that most of the patients require prior information and most of the patients that got side effects of the treatment were the ones who didn't received proper prior information [15]. Fatigue was reported in 4% of patients in our study. In a study done by Smets et.al fatigue and its relationship with radiotherapy was studied where patients who underwent radiotherapy were found to have statistically significant association between pre and post treatment fatigue scores[16]. Besides the physical effects patients undergoing chemoradiation are also found to have emotional disturbances. In a randomised control trial done by Zen Guo et.al, it was concluded that psychosocial interventions given during radiotherapy not only overcomes emotional disturbances but also improves quality of life[17].

V. Conclusion

Majority of the patients had a fair level of knowledge of the precautions to be taken, possible side effects of chemoradiotherapy and were satisfied with care provided. This outcome probably must have been the impact of the effective counselling done by experts at the time of initiation of the treatment.

Besides curative methodologies, preventive measures taken upfront could play a significant role in reducing the morbidities associated with chemoradiation treatment.

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