

COMPARATIVE ANALYSIS OF TREATMENT-RELATED SIDE EFFECTS IN ORAL CANCER PATIENTS UNDERGOING CHEMOTHERAPY AND RADIOTHERAPY IN BHOPAL

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Abstract

The aim of this study is to compare the occurrence of common side effects among oral cancer patients receiving chemotherapy and radiotherapy in Bhopal. A sample of 300 patients (150 from each therapy group) was assessed for symptoms such as nausea, vomiting, loss of appetite, mouth sores, difficulty in swallowing, diarrhea, and fatigue. The findings indicate vomiting and loss of appetite were more prevalent in chemotherapy, while fatigue and mouth sores were more frequently reported by radiotherapy patients.

Introduction

Oral cancer treatment through chemotherapy and radiotherapy often results in various side effects that significantly impact patient health and nutrition. Identifying and comparing these side effects is essential to support appropriate nutritional interventions and symptom management during therapy. This study focuses on analyzing the side effects experienced by patients from both therapy groups in the Bhopal region.

Objectives

1. To identify common side effects in oral cancer patients undergoing chemotherapy and radiotherapy.
2. To compare the frequency of these effects between the two groups.
3. To provide evidence for supportive care interventions during cancer therapy.

Methodology

Study Design: Cross-sectional

Sample Size: 300 oral cancer patients

Groups: 150 chemotherapy, 150 radiotherapy

Location: Bhopal

Data Collection: Structured questionnaire

Parameters: Nausea, vomiting, loss of appetite, mouth sores, difficulty swallowing, diarrhea, fatigue

Analysis: Descriptive statistics and bar chart visualization

Results

Table: Side Effects Reported by Patients

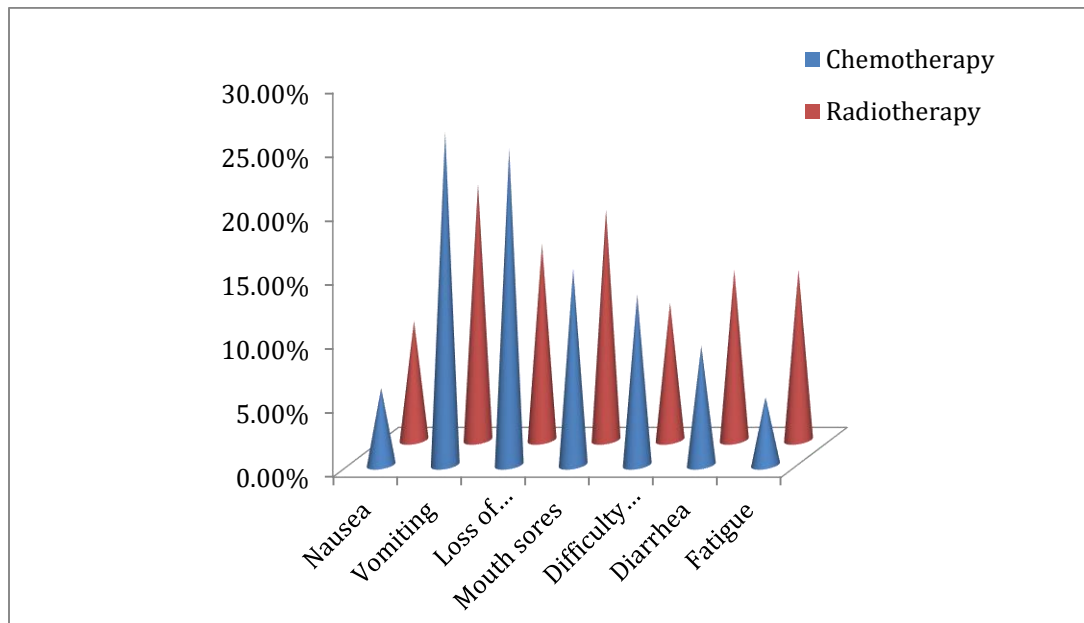


Figure: Common Side Effects Reported by Oral Cancer Patients Undergoing Chemotherapy and Radiotherapy

Interpretation of Results

The analysis of therapy-related side effects among oral cancer patients reveals noticeable differences between those receiving chemotherapy and radiotherapy:

- Chemotherapy patients experienced a higher incidence of vomiting (26%) and loss of appetite (24.7%). These symptoms are likely caused by the systemic nature of chemotherapy, which affects the entire body, particularly the digestive system. These side effects can lead to reduced food intake and deterioration in nutritional status if not managed properly.
- Radiotherapy patients reported more cases of fatigue (13.3%) and mouth sores (18%). This is understandable, as radiotherapy, especially in the head and neck area, often damages healthy cells along with cancer cells, causing oral mucositis and general body weakness due to cumulative radiation exposure.
- Nausea, diarrhea, and difficulty in swallowing were present in both groups to a moderate extent. These symptoms can be linked to both treatments as they commonly irritate the gastrointestinal tract and oral region.

The data suggests that each treatment type causes a distinct pattern of side effects, which

must be addressed through individualized supportive care:

- For chemotherapy patients, priority should be given to controlling nausea and maintaining appetite through medication, small frequent meals, and nutrient-dense diets.
- For radiotherapy patients, focus should be on managing oral health, maintaining hydration, and combating fatigue with soft, soothing foods and rest.

Overall, understanding these side effect patterns is crucial for healthcare providers to plan effective dietary interventions, symptom relief strategies, and to improve the overall quality of life of oral cancer patients during treatment.

Conclusion

Oral cancer therapies lead to various side effects which vary in frequency depending on the treatment type. Recognizing these patterns is crucial to developing nutritional and clinical support strategies to improve treatment tolerance and quality of life.

References

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