

**ASSESSMENT OF THE SEVERITY OF ORAL MUCOSAL LESIONS
AND TASTE DISTURBANCES INDUCED BY CHEMOTHERAPY
AND RADIOTHERAPY IN BREAST CANCER PATIENTS**



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ABSTRACT

Background and objectives:

Breast cancer is a common malignant disease among women throughout the world, and in recent years breast carcinoma is emerging as the commonest female malignancy in the developing Asian countries. Breast cancer is the second most common type of cancer after lung cancer (20.9% of cancer incidence in both men and women) and the fifth most common cause of cancer death.

These patients are treated by different modalities such as surgery, Radiotherapy(RT), Chemotherapy (CT) and combination of RT & CT. The reported oral adverse effects of CT & RT are mucosal lesions, oral discomfort, pain, hemorrhage, salivary gland hypo function , oral dryness and taste disturbances, higher susceptibility to bacterial, fungal, viral infections as well as neurotoxicity. The drugs commonly used in breast cancer are cyclophosphamide, methotrexate and 5-fluorouracil. Hence this study was carried out to assess the oral mucosal changes such as mucositis, oromucosal pain, oral dryness, taste disturbances, in the oral cavity of breast cancer patients undergoing CT&RT.

Methods:

An observational co-hort study was conducted in a 60 newly diagnosed non hormonal breast cancer patients in grade II& III treated by surgery and undergoing chemotherapy & Radiotherapy treatment in MNJ Institute of Oncology & Regional Cancer center ,Hyderabad from 2011 to 2012. Mucositis were assessed clinically by WHO grading, taste disturbances ,mucosal pain and xerostomia were evaluated by subjective assessment questionnaire.

Results:

As the chemotherapy progresses, the severity of oral mucositis, oromucosal pain, oral dryness, taste disturbances and gingival index scores also increases. However, there was no post radiation mucosal involvement other than gingival index scores during RT of breast cancer.

Conclusion:

Based on the study results, we concluded that there was an overall increase in severity of oral mucositis, oro mucosal pain, oral dryness, taste disturbances in patients undergoing CT compared to baseline and 6 months after CT. However there was no post radiation mucosal involvement other than gingival index scores. This may be because oral mucosa doesn't come in field of irradiation in breast cancer therapy. Since the study sample accrued during the study period was small, a larger sample with a long term follow up of CT&RT patients is advocated to arrive at a proper assessment and management of oro mucosal alterations .

Key word: Breastcancer, Chemotherapy, Radiotherapy, oral mucositis, taste alteration, oral dryness.