Combination of Docetaxel (Taxotere) and Cisplatin in Patients with Metastatic Breast Cancer: A New Therapeutic Approach

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Abstract

Metastatic breast cancer is a major cause of death from cancer across the world. The combination chemotherapy of Taxotere with Doxorubicin or Epirubicin has shown a promising result in metastatic breast cancer patients. But as Doxorubicin or Epirubicin has cardio-toxicity, we used Cisplatin in place of Doxorubicin or Epirubicin and have achieved good results in the treatment of metastatic breast cancer having myocardial ischaemia or infarction. We carried out the study to evaluate the response of Docetaxel (Taxotere) and Cisplatin in patients with metastatic breast cancer having myocardial ischaemia who have not responded or have relapsed after treatment of loco-regional radiotherapy and chemotherapy with CMF.

Introduction

Chemotherapy of patients of metastatic breast cancer with Taxotere and Doxorubicin with reasonable performance status has been known to provide better symptom control and thereby prolonging survival and improving quality of life². But as these patients had myocardial ischaemia and were unfit for Doxorubicin, Cisplatin was given instead of Doxorubicin with Taxotere and good results were observed.³

Patients & Method

Four patients with histologically proven infiltrating ductal carcinoma of breast in all the cases having myocardial ischaemia who were not responded or relapsed after having chemotherapy with CMF and Radiotherapy have been included in this study. All the patients had reasonable performance status and two of them had pleural effusion, bone metastases and all of them had locally advanced disease. Patients had good renal and hepatic function.

Treatment Protocol

Chemotherapy with Taxotere 75mg/m² and Cisplatin 75mg/m² were given three weekly with prior premedication of Dexamethasone and Ondansetron. These patients were treated with the combination chemotherapy of Taxotere and Cisplatin from August 2000 to February 2001. The response was assessed by clinical examination, chest X-ray, USG of abdomen and CT scan. Six such cycles were given.

Results

All the patients achieved good clinical response and quality of life improved significantly. Neutropenia, alopecia, diarrhoea and vomiting were noticed as side effects.

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**Discussion**

When taxanes first emerged from single agent trials, there was obvious interest in exploring novel taxane-containing combination regimens in metastatic breast cancer. Anthracycline/taxane doublets were an obvious target for developmental efforts, due to the high single agent activity and widespread use of the component single agent. The rationale for studying platinum/Taxane doublets might seem less promising, but there are, in fact compelling grounds for conducting such studies. Principle rationale is provided by the ever-increasing use of Anthracycline in adjuvant programme. Secondly, it is used as the patients had myocardial ischaemia or infarction. Salmon and his colleagues suggested that the possibility of trastuzumab/platinum/docetaxel might be the most appropriate combination for the treatment of HER²-over expressing tumours in both the adjuvant and metastatic settings. Cancer international research groups have suggested its use in both early and advanced disease.

**Conclusion**

Docetaxel with Cisplatin appears to be an effective and excellent combination with acceptable toxicity. Cisplatin can be used as an alternative of Doxorubicin in metastatic breast cancer of patients having myocardial ischaemia. Further studies are needed to evaluate whether this combination can achieve promising results.

**References**


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