# SIDE EFFECT OF 5-HYDROXYTRIPTAMINE$_3$ RECEPTOR ANTAGONIST IN THE PROPHYLACTIC TREATMENT OF EMESIS INDUCED BY CISPLATIN AND TAXOTERE CHEMOTHERAPY : A CASE REPORT

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## ABSTRACT

The 5-hydroxytryptamine$_3$ receptor (5-HT$_3$ receptor) antagonists recently has been developed as a class of new anti-emetic agent. These drugs were initially found to prevent vomiting due to Cisplatin, a chemotherapeutic drug with strong emetic effect, but subsequent clinical studies have shown that 5-HT$_3$ receptor antagonist are also effective in controlling vomiting due to other anti cancer drugs and radiotherapy.

A 45 years old malay female was admitted for first cycle of Cisplatin and Docetaxel chemotherapy treatment for her right side breast cancer. She had diagnosed to have right site of medullary breast cancer.

Previously she had been surgically treated of her breast cancer followed by radiation three years ago. Adriamycin and Cyclophosphamide Chemotherapy regime had been given over 4 cycles. A next year follow-up investigation, included surgical biopsy didn't show neither any residual tumour nor lymph nodes involvement, Chest X ray, abdomen Ultrasonography and Mammography showed no evident of metastasis. Fine Niddle Aspiration Cytologic also didn't find diagnostic material. Unfortunately, she currently complained of pain at her chest and back. Furhter, bone scan had investigated increase in uptake of tracer or infiltration to the 6$^{th}$ rib of sternum. CT-thorax showed there is soft tissue mass at the right anterior chest wall involving the pectoralis major muscle. This is the latest diagnosed as a recurrent cancer with early metastasis.

On this regime, cisplatin was given 110 mg in 1 L normal saline for 3 hours and Taxotere 110 g in 500 ml for 1 hour. Intravenous 5-HT3 receptor antagonist (Granisetron$^R$) 3 mg with IV Dexamethason 8 mg and Dexamethason tablet 4 mg QID were given half hour prior the chemotherapy. Other medications given before chemo included Voltaren tablet 50 mg tds, Lactulose syrup 20 ml ON and Dihydrocodein 30 mg tds. During received this chemotherapy, generally patient was comfortable and did not complaint nausea and vomiting until complete cycle, but one day after this cycle patient complained of constipation and headache.

Cisplatin and Taxotere chemotherapy are effective in breast cancer but however, the side effect of this treatment include potentially debilitating nausea and vomiting. Successful anti emetic therapy can enable patients receiving chemotherapy to maintain and improve their quality of life