Incidence of Infusion Hypersensitivity Reaction After Withholding Dexamethasone Premedication in Early Breast Cancer Patients Not Experiencing Two Previous Cycles of Infusion Hypersensitivity Reaction for Weekly Paclitaxel Chemotherapy

Walailuk Tanpipattanakul, M.D., Nattaya Poovorawan, M.D., Thanapoom Rattananupong, M.D., Poranee Laoitthi, M.D., Piyada Sithidetphaiboon, M.D., Suebpong Thanasanvimon, M.D., Virote Sriuranpong, M.D. and Napa Parinyanitikul, M.D.

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**Background:** Premedication with dexamethasone is an essential part in prevention of hypersensitivity reaction (HSR) associated with taxane administration. However, the possibility of stopping dexamethasone premedication has been investigated in previous studies with the purpose of reducing steroid's adverse events, either result and particular protocol was limited. So, our study aims to evaluate the incidence of infusion HSR after discontinuing dexamethasone premedication in patients who did not have experiencing two previous cycles of weekly paclitaxel associated infusion HSR.

**Method:** Early breast cancer patients who received adjuvant weekly paclitaxel in a retro-prospective cohort from January 2012 through February 2016 at the King Chulalongkorn Memorial Hospital were reviewed. All patients received a standard premedication protocol prior to the first and second paclitaxel infusion. Dexamethasone was omitted in later cycles in all patients who did not have experiencing infusion HSR. Patients who developed HSR during first or second cycles of paclitaxel infusion were excluded. The incidence of HSR during later cycle of paclitaxel administration and factors associated with this adverse reaction were collected.

**Results:** Eighty-one out of eighty-five patients who did not experience infusion HSR after two cycles of weekly paclitaxel administration were identified. five out of Eighty-one patients reported grade I- II HSR (6.25%), which occurred mostly during the first six cycles (80%). Temporary discontinued paclitaxel infusion was observed in all HSR patients. No differences regarding age, BMI, menopausal status and underlying disease between HSR and non-HSR group were found. About safety profile, peripheral neuropathy (gr II 13.5% gr III 2.4%), edema (9.8%) and skin rash (8.6%) were commonly reported whereas insomnia and dyspepsia were rarely described in withholding patients.

**Conclusion:** Withholding dexamethasone premedication in non-experiencing HSR patients after two previous cycles of weekly paclitaxel administration was safe and did not impact on higher incidence of HSR. Discontinuing dexamethasone protocol should be recommended generally in these patients especially with high risk for steroid-induced side effects.