apy for preventing cancer recurrence or as salvage therapy for metastatic breast cancers.[1,17] However, considering the relapse in diseases after giving anthracycline, there are more patients receiving palliative therapy with non-anthracycline-containing regimens, such as paclitaxel, vinorelbine, or gemcitabine. It's been reported that single-agent paclitaxel may exert a response rate of 26%–38 % as first-line treatment for metastatic breast cancer.[1]

The therapeutic activity of paclitaxel occurs through disruption of the tubulin-microtubular system.[19] It binds reversibly and specifically to the β-subunit of tubulin, promoting its assembly and stabilizing the microtubules after spindle formation has occurred. These compounds induce the formation of stable microtubule bundles, impairing the reorganization of the microtubular skeleton and blocking cells in the G_2-M phase of the cell cycle.[20] The first study of paclitaxel in patients with ovarian cancer was reported in 1989, which later led to the approval of paclitaxel in the treatment of breast cancer in many countries.[21]

Several treatment-related adverse reactions caused by paclitaxel have been reported. Hypersensitivity, neutropenia, and thrombocytopenia are common ones, but there can be minimized by applying a moderate dosage with a 3-h infusion.[12] In the meantime, utilizing a moderate dosage also prevents possible cumulative adverse events.[22] Fixed doses of 175 mg/m^2 paclitaxel were given as our standard treatment. Nonetheless, sensory neuropathy (76%) and myalgia (44%) were the major adverse effects noted in this study. Bone marrow suppression ranked the third (32%) and 16% grade II–III hepatotoxicity (Table 3).

Regarding to the responses of visceral organs and soft tissues, we found that patients with lung metastasis (7/14) were much more sensitive to paclitaxel than were patients with other organ metastasis.

The combined regimen of paclitaxel and carboplatin for advanced breast cancer or ovarian cancer patients is notorious for its high incidence of inducing neurotoxicity.[23,24] In our study, we found that single-agent paclitaxel utilized without combination with carboplatin might result in almost the same degree proportion of neurotoxicity. So far, we are trying to overcome this obstacle of treatment and decrease the adverse effects to the neurologic system by giving NSAIDs (non-steroid anti-inflammatory drugs), while the results of this treatment are still pending in our hospital.

In conclusion, the present study can serve as an index to demonstrate that single-agent paclitaxel at 175 mg/m^2 delivered by a 3-h infusion produced a good response as first-line treatment in metastatic breast cancer and is considered to be easily administered in the clinic with manageable toxicity.

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