

INVESTIGATION OF THE ANTIMETASTATIC POTENTIAL OF *T. SPICATA* IN HUMAN BREAST ADENOCARCINOMA CELLS COMBINED WITH STANDARD CHEMOTHERAPY

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ABSTRACT

Objective: The aim of this study was to determine the effects of hexane extract prepared from *Thymra spicata* (TS) on the cytotoxic, antioxidant and metastatic process in human breast adenocarcinoma cell lines (MDA-MB-231, BT-474) in combination with the chemotherapeutic drug Paclitaxel (PAC).

Materials And Methods: IC25 and IC50 concentrations of TS and PAC in MDA-MB-231 and BT-474 cell lines were determined by the modified MTT method we developed in our laboratory. Cell motility as an indicator of metastatic potential was evaluated by in vitro wound healing method. MDA was evaluated in cellular cytotoxicity in MB 231 by TAS and TOS analyses.

Results: IC25 and IC50 concentrations of TS and PAC in MDA MB 231 and BT-474 cell lines were determined by the modified MTT method we developed in our laboratory. Cell motility as an indicator of metastatic potential was evaluated by in vitro wound healing method. MDA was evaluated in cellular cytotoxicity in MB 231 by TAS and TOS analyses.

In wound healing experiments where migration and invasion were tested: MDA MB 231; There was no statistically significant difference in the effect of PAC and TS25/PAC25 doses on cell migration. BT-474; TS and TS25/PAC25 doses were found to be effective in stopping cell migration.

Conclusion: The findings revealed the prediction that TS may be among the candidate agents in terms of giving as supportive treatment.

Keywords: *Thymra Spicata*, Migration, Oxidative Stress