

The effect of aqueous and ethanolic extracts of *Artemisia herba alba* on human laryngeal carcinoma and murine mammary adenocarcinoma cell lines

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Abstract

The present study was carried out to evaluate the cytological effects of aqueous

(AE) and ethanolic (EE) extracts of *Artemisia herba alba* on human laryngeal carcinoma (Hep-2) cell line and murine mammary adenocarcinoma (AMN-3) cell line *in vitro*. The cytological study performed simultaneously with cell growth assay. The results of study revealed concentration-dependent cytological changes like patchy growth inhibition, loss of confluent feature and cellular degeneration after exposure to the lowest concentrations (156.25 and 312.5 µg/ml). The early findings of cytolysis were seen after exposure to 625 µg/ml. While the highest concentrations (1250, 2500 and 5000 µg/ml) caused severe growth inhibition with marked cytolytic features including loss of cellular outlines, large numbers of dead cells and high content of cellular debris. In conclusion, the results of this study revealed the high cytological effect of *Artemisia herba alba* extracts on Hep-2 and AMN-3 cell lines *in vitro*.

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