Uncaria tomentosa Reduces Lipid Peroxidation and DNA-Damage from Chemotherapy

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SUMMARY. Complementary and alternative medicine (CAM) has been used to improve the quality of life for a large number of cancer patients worldwide. Among these CAMs, the use of Uncaria tomentosa has demonstrated antioxidant properties and enhanced neutrophil recovery after chemotherapy. U. tomentosa exhibits protective antimutagenic effects and shows an enhancement in DNA repair; therefore, we measured the mitotic index of Allium cepa and characterized the antioxidant effects to determine the capacity of U. tomentosa to ameliorate chemotherapy-induced DNA damage. U. tomentosa extract showed no mutagenic effects and exhibited antimutagenic potential, reducing the DNA damage and anaphase-telophase chromosome aberrations that result from treatment with the chemotherapeutic oxaliplatin. A reduction in oxaliplatin-induced lipid peroxidation was also observed.

KEY WORDS: Antimutagenic, Cytogenetic analysis, DNA repair.

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