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Effect of Cyclea peltata (Kahipiththan) on Human Blood Coagulation

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Abstract

Cyclea peltata leaf extract has been traditionally used as a remedy to control bleeding from fresh wounds. However, the potential of this leaf extract as an external blood coagulant was not studied in depth to rationalize its pharmaceutical significance. Thus, the present study was undertaken to evaluate the effect of C. peltata leaf extract on in-vitro human blood coagulation. Blood samples drawn from 25 healthy individuals of both sexes belonging to the age range of 25-30 years were analyzed using Lee and White method. Separate sets of test and control samples were run simultaneously. Leaf extract of C. peltata (0.5 mL aliquot) was added to three Kahn tubes and they were the test sample set. Similar volume of normal saline in triplicate was used as the control. Drawn blood (1.0 mL) was added to all six tubes of test and control sets immediately and both sets of tubes were incubated at 37°C in a water bath. Each tube was observed for the occurrence of undisturbed clot formation. Average clotting time was calculated for both the test set of tubes and control set of tubes. The obtained value for the sample set per individual was compared with the same set of controls. A statistically significant reduction in average clotting time ($p \le 0.05$) was reported for the test set of tubes containing C. peltata leaf extract than the control that of the control set. These preliminary observations suggest that C. peltata leaf extract has a potential to affect positively on human blood coagulation.

Keywords: Blood coagulation, clotting time, Cyclea peltata

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