Marsypianthes chamaedrys EFFECTS TOWARDS PLASMA CLOTTING AND PROCOAGULANT ACTIVITIES OF DIFERENT VENOMS

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Marsypianthes chamaedrys is a common herb that occurs in the North and Northeast regions of Brazil and popularly used against snakebites. In the present work we observe anticoagulant effects of M. chamaedrys extract (Mc) and it's potential inhibitory effects on procoagulanting activities of B. jararaca venom and Lonomia obliqua caterpillar bristles extract. The Mc (1.0 mg/mL) showed to prolong the thrombin time (control values 21.3 sec) by 2 fold. The activated partial thromboplastin time (control values 53.8 sec) showed to be prolonged more than 5 fold. On the other hand 3.2 mg/mL of this extract were necessary to prolong 3.4 fold the prothrombin time (control values 20.9 sec). Mc 2.1 and 0.04 mg/mL inhibited 100% fibrinogen clotting assay induced by thrombin (17.4 nM) and B. jararaca venom (0.1 mg/mL). Mc (3.6 mg/ml and 5.6 mg/ml, respectively) was also able to counteract the B. jararaca venom and L. obliqua bristles extract (both 5 μg/ml)-induced plasma coagulation. However, Mc did not show any inhibition upon the human platelet aggregation induced these venoms. This study shows the importance of scientifically evaluating plants used in popular medicine for validation, also establishing methods for new formulations and correct dose levels. Support: CNPg, CAPES, FAPERJ

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