Potential Antiophidian of the Aqueous Extract from *Polygonum hydropiperoides* Against of the *Bothrops pauloensis* Snake Venom

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The plants are a valuable source of new pharmacologically active compounds. Many of them have already been studied for their potential as snake anti-venom, and successful results were achieved. The snake venom is considered the most complex in the animal kingdom, and induces a variety of harmful effects such as coagulopathy, miotoxicity bleeding and others. The present study aims at evaluate the antiophidian potential of the *Polygonum hydropiperoides* aqueous extract to neutralize the *Bothrops pauloensis* venom when incubated for 30 min at 37°C, with the vegetal extract at the ratios 1:1, 1:5, 1:10 and 1:50 (venom/extract; w/w). The results showed that the vegetal extract inhibited the venom in the coagulant activity, by extending plasma coagulation time at the ratio of 1:1(venom/extract; w/w), reaching 100% inhibition in the ratio 1:50. For hemorrhage activity, the vegetal extract cause a regression in hemorrhagic halo in the ratio 1:50 of around 100%. Also, occurred inhibition of venom induced phospholipase A_2 activity, with the occurrence of a 17.8 and 27.3% decrease of the diameter of hemolytic halos in the ratios 1:5 and 1:50 (venom/extract; w/w), respectively. Thus, the *Polygonum hydropiperoides* extract was found to completely inhibit coagulant and hemorrhagic activities, and partially inhibit phospholipase A_2 activity induced of the *Bothrops pauloensis* venom, which allows us to affirm that this vegetal extract has a significant antiophidian potential.

Key words: *Polygonum hydropiperoides*, *Bothrops pauloensis,* vegetal extract, venom, inhibition.

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