

Comparative Efficacy of *Sebastiania hispida* and *Byrsonima Crassifolia* in the Neutralization of Muscle Damage Caused by *Bothrops Moojeni*

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Bothrops moojeni snake bite causes hemorrhage and myonecrosis, however the standard anti-venom therapy generally is ineffective in neutralizing the local effects. In this way, it is important to identify complementary therapies to the use of antivenom, such as medicinal plants. The objective was to compare the effectiveness of aerial parts of *Sebastiania hispida* and *Byrsonima crassifolia* to neutralize the muscle damage caused by *B. moojeni*. Wistar rats were used and was separated into 4 groups (n=4): Control (saline); Venom (Vbm); Venom and hydro-methanolic extract of *S. hispida* (VSh); Venom and water extract of *B. crassifolia* (VBc). The venom (40 µg/mL) or saline was injected in the gastrocnemius muscle of the right paw. The extracts were administered orally. After the periods of 24 hours, 3, 7 and 14 days, blood was collected for evaluation of creatine kinase (CK) and the gastrocnemius muscle was used for histological analysis. Vbm caused an increase in CK levels, indicating that there was muscle damage and only the VSh extract reduced CK levels. Muscle damage was confirmed by histological analysis, being observed necrosis, hemorrhage and edema in Vbm group. After 14 days the Vsh extract reduced hemorrhage, edema and necrosis, while Vcb only reduced the hemorrhage. Thus, medicinal plant extracts are great alternatives to counteract the local damage caused by *B. moojeni* and, among the two species analyzed, the extract of *S. hispida* was the most effective in neutralizing these effects.

Biography:

Doroty Mesquita Dourado, PhD and postdoctoral studies from UNICAMP/SP. She works as a professor and researcher at University Anhanguera Uniderp in Campo Grande, MS. Has published more than 20 papers in reputed journals and has been serving as an editorial board member of reputed. Their researches are carried out with medicinal plants of the Pantanal and Cerrado in the Laboratory of Toxinology and Medicinal Plants of the University Anhanguera Uniderp in Campo Grande, MS.