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Título	Bothrops fonsecai snake venom activities and cross-reactivity with commercial bothropic venom
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Resumo	<p>In this work, we examined some biochemical and biological activities of <i>Bothrops fonsecai</i> venom, a pitviper endemic to southeastern Brazil, and assessed their neutralization by commercial bothropic antivenom (CAv). Cross-reactivity of venom with CAv was also assessed by immunoblotting and size-exclusion high performance chromatography (SE-HPLC). <i>Bothrops fonsecai</i> venom had PLA₂, proteolytic and esterase activities that were neutralized to varying extents by venom:antivenom ratios of 5:1 and 5:2 (PLA₂ and esterase activities) or not significantly by either venom:antivenom ratio (proteolytic activity). The minimum hemorrhagic dose (69.2 µg) was totally neutralized by both ratios. Clotting time in rat citrated plasma was 33 ± 10.5 s (mean ± SD; n = 5) and was completely neutralized by a 5:2 ratio. Edema formation was dose-dependent (1–30 µg/site) and significantly inhibited by both ratios. Venom (10–300 µg/mL) caused neuromuscular blockade in extensor digitorum longus preparations; this blockade was inhibited best by a 5:2 ratio. Venom caused myonecrosis and creatine kinase release in vivo (gastrocnemius muscle) and in vitro (extensor digitorum longus) that was effectively neutralized by both venom:antivenom ratios. Immunoblotting showed that venom components of ~ 25–100 kDa interacted with CAv. SE-HPLC profiles for venom incubated with CAv or specific anti-<i>B. fonsecai</i> antivenom raised in rabbits (SAv) indicated that CAv had a higher binding capacity than SAV, whereas SAV had higher affinity than CAv. These</p>



	findings indicate that <i>B. fonsecai</i> venom contains various activities that are neutralized to different extents by CAv and suggest that CAv could be used to treat envenoming by <i>B. fonsecai</i> .
Fomento	