

The Effects of Tamarindus Indica Seed Extract On Mice Kidney, Liver and Skin Following Envenomation with *Daboai Russellii* And *Naja Kaouthia*

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Introduction: Tamarindus indica seed extract (TSE) has anti-snake-venom properties. This study examined the histological changes of kidney, liver and skin of mice envenomed with either *Daboai russelli* and *Naja kaouthia* and treated with TSE. **Materials and Methods:** ICR mice were used. Group 1 mice (n=8) were given subcutaneous (SC) venom only of either species. Group 2 (n=8) envenomed mice were treated with SC TSE 30mg/20g at the same site 30 minutes after envenomation with either species. Tissue samples were harvested at 24 hours and 1 week. Transversely cut kidney, biggest liver lobe, and skin sample from the venom injection site were fixed in 10% formal-saline and stained with Haematoxylin-Eosin for light-microscopy analysis. **Results:** Group 1 mice exposed to *D.russelli* venom, all died within 48hours. Hence, no comparison was made between Groups 1 and 2 at 1 week. However histological comparison was made within Group 2 at 24 hours and 1 week. Kidney histological changes of envenomed mice showed mild nephropathy; liver showed inflammation and mild liver injury. Skin samples showed disruption of the skin architecture. These changes, worsened after 1 week. However, changes in the skin were unaltered after 1 week for *N.kaouthia*. When TSE 30mg/20g was administered, there was restoration of tissue architecture in mice envenomed with either species. **Conclusion:** When mice were exposed to LD₁₀₀ of either snake venoms, histological changes took place within 24 hours. This study showed that TSE 30mg/20g was able to restore tissue architecture within 24 hours.