In this issue of International Immunopharmacology, Hilda Vásquez and her colleagues present the pharmacokinetics of an F(ab′)2 scorpion antivenom administered intramuscularly in human volunteers. Although to some readers' eyes this topic may appear frightfully esoteric, it in fact addresses a controversy that has plagued clinical toxicologists for decades, one that affects the life and health of millions of people bitten or stung by venomous creatures in the rural and developing world. Hitherto, the paucity of human data addressing the controversy has greatly hindered professional discourse.

Worldwide, most venom injuries – including the majority of clinically important scorpion stings – occur in tropical and developing countries. In most cases, intravenous antivenom, prepared either from whole immunoglobulin or from F(ab′)2 fragments targeted against venom of snakes or scorpions, is a long-accepted standard of care. Worldwide shortages of antivenom are ongoing, driven by a combination of adverse economic, geopolitical and practical considerations. The situation has resulted in the designation of venom injury, by the World Health Organization, as a Neglected Tropical Disease.

Compounding and confounding shortage issues in remote areas are the problem of access to a safe medical environment for the administration of serum-derived treatments, for which both Type 1 and Type 3 immune reactions are well known. Recent improvements in the safety profile of some antivenoms have reduced these risks substantially; and as a consequence smaller clinics have begun to stock antivenom, regardless of whether these clinics are able to provide intravenous treatment. Unmonitored and unpublished reports suggest that tens of thousands of rural patients may annually be receiving scorpion antivenom by intramuscular injection, with a prevailing belief by providers that such administration is saving lives. This “20,000 Mexicans can’t be wrong” theory has understandably generated heated debate between pragmatists and purists; but in the absence of human pharmacokinetic information the argument has involved more anguish than answers.

Vásquez et al. at last bring some data to the table with “Pharmaco-kinetics of a F(ab′)2 scorpion antivenom administered intramuscularly in healthy human volunteers.” Their work does not fully answer such issues as the relative benefit of partial venom neutralization, in patients with a risk of death during transport. But, importantly, it brings a meaningful basis to the issue of effective dose, in human beings, of these potentially life-saving emergency drugs. Perhaps the next collegial debate will apply this information to address questions of dose, of improved public health research methods, or of how best to provide care for our most vulnerable, rural, children.

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