

Evaluation of the Inoserp antivenom for snakebites in Cameroon

Fai Karl, Epicentre, Cameroon

Background

While 2.5 million envenomings and 130,000 deaths occur globally due to snakebites, with 1 million envenomings and 30,000 deaths in sub-Saharan Africa, the accessibility of antivenom for treatment of snakebites remain limited. The Inoserp® Pan-Africa antivenom is being used in many African countries including Cameroon but there is few data on its efficacy or tolerance in those settings. We therefore aim to evaluate the tolerance and efficacy of the Inoserp® Pan-Africa antivenom (AVS) in Cameroon.

Methods

We performed a Phase IV clinical trial and included participants 5 years and above with snakebites in 14 healthcare centers across 6 of the 10 regions of Cameroon. Participants with envenomation were treated with Inoserp AVS and followed-up for 3 days in the hospital and 15 more days at home. The main study endpoints were complete follow-up to day 15, occurrence of adverse events, including disability or death.

Results

Between October 15, 2019 and April 30, 2021, we included 427 participants with snakebites. *Echis ocellatus* (43.3%) was the most incriminated. Most frequent signs at admission were pain and edema with 90.9% (388/427) and 75.2% (321/427) respectively.

We administered AVS to 81.3% (347/427) of patients with an average dose of 2 doses of AVS. Coagulation disorders was present in 50.4% (215/427) of the participants. We reported 12 deaths (2.7%); none were imputed to the administration of AVS. According to preliminary analysis necessitating confirmation, we observed at least one mild or moderate adverse event in 75 of 347 patients (21.6%), including tachypnea, tachycardia and bradycardia.

Conclusions

Snakebites are still an important neglected problem. Treatment with the Inoserp® Pan-Africa AVS appeared to be well tolerated in the Cameroonian patients and ongoing analysis will help to better assess its effectiveness.

Snakebites are neglected and their management is most at times inappropriate. We found the Inoserp® Pan-Africa antivenom to be well tolerated in the Cameroonian population.