

Vital Network for Brazil – National Network of Information, Discussion and Cooperation concerning Venomous Animals

Brazil TK (1), Melgarejo AR (2), Werneck de Castro AJ (2), Barraviera B (3), Souza CMV (2), Brazil EV (4), Cotta GA (5), Puerto G (6), Pauli I (7), Minozzo JC (7), Prado-Franceschi J (8), Cunha LER (2), Lima MVC (5), Lira-da-Silva RM (1), Bochner R (9), Ferreira Júnior RS (3), Souza SP (1), Queiroz VS (7)

(1) Regional Center of Ophiology and Venomous Animals (NOAP), Federal University of Bahia (UFBA), Salvador, Bahia State, Brazil; (2) Vital Brazil Institute (IVB), Niterói, Rio de Janeiro State, Brazil; (3) The Center for the Study of Venoms and Venomous Animals (CEVAP), São Paulo State University (UNESP – Univ Estadual Paulista), Botucatu, São Paulo State, Brazil; (4) House of Vital Brazil Association (CVB), Campanha, Minas Gerais State, Brazil; (5) Ezequiel Dias Foundation (FUNED), Belo Horizonte, Minas Gerais State, Brazil; (6) Butantan Institute (IB), São Paulo, São Paulo State, Brazil; (7) Center for the Production and Research on Immunobiologicals (CPPI), Piraquara, Paraná State, Brazil; (8) The Brazilian Society of Toxinology (SBTx), São Paulo, São Paulo State, Brazil; (9) Institute for Communication and Scientific and Technological Information on Health (ICICT), Oswaldo Cruz Foundation (Fiocruz), Rio de Janeiro, Rio de Janeiro State, Brazil.

At a meeting held in November 2010 at the Vital Brazil Institute in Niteroi, Rio de Janeiro, a group of researchers put forward a proposal for the creation of the Vital Network for Brazil (Rede Vital Para o Brasil) – National Network of Information, Discussion and Cooperation concerning Venomous Animals, which aims at forming a concept, developing and stimulating the implementation of venomous animal-related projects, especially those projects which provide relevant information and advancement for the services provided to the population in general. The network should also promote discussions and cooperation among various institutions and professionals, giving permanent support to the exchange of experiences, training and publication of scientific material. Moreover, it should monitor the matters of national production of hyperimmune serum and its supply, make specific antigens available for research and production purposes, develop appropriate handling procedures for the transportation of venomous animals, qualify professionals and preserve the historical memory of the scientific research developed with venomous animals and their venoms.

It should be taken into account the inexistence of accurate national statistical data on accidents with venomous animals and that there are under and over notifications of those accidents within the current systems; the disregard to the relevance of the work done at zoological collections; the difficulties in accessing information of some

collections; the generalized lack of knowledge about the existence of specific snake venom as to species and their availability in Brazil; the occasional shortage of venom for research and serum production; the lack of integration between information and its dissemination; the fact that there is no specific legislation for collection, transportation and care of animals and their breeding facilities; the absence of a line of communication between legislators and scientific societies; the lack of investments in historic estates and of qualified permanent media for the volumes of work in progress in the various academic and research institutions. As a consequence of such difficulties, which have been frequent and redundant for the last 20 years and considering that neither the societies nor their scientific congresses in a variety of venomous animal-related sub areas have had success in their requests associated with the fact that the public sector has not been able to reach the desired level of information in order to minimize such difficulties, a conclusion was reached that a wide social network could be the path to a common ground resolution which would address the main persisting issues.

In order to reach this goal three work groups were formed: Production and Quality of Hyperimmune Serum, Research and Development on Venomous Animals, and Information and Education.

The objectives of the first group are: to study venom stability and standardization of protocols

for production of reference venom, support the pharmacovigilance of hyperimmune serum, supervise production process and presentation of hyperimmune serum, evaluate and revise the legislation, give support to clinical tests and multicenter studies about the quality and efficacy of hyperimmune serum, create the Brazil Serum Stamp (standardized and qualified product also available for export), produce hyperimmune serum for Latin America and cooperate internationally with institutions alike as well as to produce serum for veterinary use.

The objectives of the group of research and development are: to update the records of venomous animals breeding establishments, to create the Venom National Bank, to pursue integration with the Ministry of Environment (The Brazilian Institute of Environment and Natural Resources – IBAMA and the Chico Mendes Institute for Biodiversity Conservation – ICMBio) and create investment programs for scientific collections and preserve the historical memory of venomous animals – taking into account the serious incident in 2010 at the Butantan Institute (1-3).

The objectives of the group of information and education are: to revise and modernize data bank and information systems regarding accidents with venomous animals, access the serum use and distribution database, give support to the venomous animals accident centers and create programs for continuous staff training and development and produce and distribute informative material.

The network executive group is constituted of researchers from the following institutions: House of Vital Brazil Association (Casa de Vital Brazil – CVB), The Center for the Study of Venoms and Venomous Animals (CEVAP/UNESP), Center for the Production and Research on Immunobiologicals (CPPI), Ezequiel Dias Foundation (FUNED), Butantan Institute (IB), Institute for Communication and Scientific and Technological Information on Health (ICICT/Fiocruz), Vital Brazil Institute (IVB), Regional Center of Ophiology and Venomous Animals (NOAP/UFBA).

On 23 and 24 of May 2011 at the CEVAP headquarters, UNESP Campus in Botucatu, at the top of the “cuesta” – where in 1896 Vital Brazil diagnosed the first crotalic accidents

– the 4th Meeting of the Network Managing Commission was held. The following issues were discussed: production and distribution of antivenom serum, scientific collections, breeding facilities of venomous animals, National Venom Bank, professional training and preservation of historical memory.

The network proposed and put forward the minutes of an ordinance to the Ministry of Health with the objective of establishing work groups to monitor matters related to the supply and production of hyperimmune serum, acquisition of specific antigens, appropriate handling of venomous animals, the production of epidemiological information and the preservation of the field memory.

This is a unique initiative taking into account that matters related to venomous animals, according to the World Health Organization, are neglected by authorities of tropical countries. For this reason the Vital Network for Brazil will contribute towards a better understanding and monitoring of the issue in question as well as promote continuous education, build a database and preserve the historical memory. The services offered to the academic community and the population should have certified quality, thus improving the scientific competency and safety while attending the injured.

CORRESPONDENCE TO

TANIA KOBLEK BRAZIL, Universidade Federal da Bahia, Instituto de Biologia, Departamento de Zoologia, Núcleo Regional de Ofiologia e Animais Peçonhentos da Bahia, Rua Barão de Geremoabo, s/n, Campus Universitário de Ondina, Salvador, BA, 40170-290, Brasil. Phone +55 71 3283 6564 Email: taniabn@ufba.br.

REFERENCES

1. Sant'anna AO. A fire consumed ... a treasure! *J Venom Anim Toxins incl Trop Dis.* 2010;16(3):398-9.
2. De Lima ME. “Vitalis Brazilis”, burning embers, beyond the ashes, at the Butantan Institute. *J Venom Anim Toxins incl Trop Dis.* 2010;16(3):400-1.
3. Warrel DA, Theakston RDG, Wüster W. Destruction of the collection of reptiles and arthropods at Butantan Institute: a view from the United Kingdom. *J Venom Anim Toxins incl Trop Dis.* 2010;16(4):534-6.