



120 YEARS OF THE ANTIOPHIDIC SERUM THERAPY

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Abstract

The 120th anniversary of the antiophidic serum therapy was celebrated last year, in 2014. The history of this therapy is interspersed by a series of debates established between two of the four scientists to whom the discovery is attributed. Albert Calmette (French) and Vital Brazil (Brazilian) played out a thrilling scientific debate on whether the antivenum treatment they studied along with Césaire Phisalix; Gabriel Bertrand (French) should use one specific serum or a range of different species. The correspondence the two scientists exchanged was kept, and is available, at the National Museum of Natural History in Paris. Defended by the Brazilian scientist, the monovalent serum therapy prevailed as the effective treatment. Most interesting, this centenary medical conduct is recommended to this day. Evidently improvements in its production processes as well as in the quality control requirements have been made. Currently, one can find differences in the process of obtaining the plasma; the stage of enzymatic digestion, fractioning, and in the presentation of the final product. But in its essence it is the same medicine and has exactly the same pharmacological action, that is, to neutralize toxins inoculated by poisonous animals in the body. It is uncertain whether there will be any upgrading in this therapy in the near future. The appearance of a new drug that can replace this secular therapy, with the same efficacy and safety, depends on studies barely underway that propose a new technology using synthetic serum (Aptamers), which, in other words, means it will not be available for use before the 2030 decade, as the research is still in the proof of concept phase. In Brazil, the anti-ophidic serum is 100% produced by public laboratories, as is also public the health service for the victims by venomous animals in Brazil.