

Tick bite fever in South Africa (A Rickettsial Disease)

Hilary Denis Solomons

P.O. Box 64203, Highlands North, 203, South Africa.

***Corresponding Author:** Hilary Denis Solomons, P.O. Box 64203, Highlands North, 203, South Africa.

Received Date: September 30, 2024; **Accepted Date:** October 08, 2024; **Published Date:** October 17, 2024

Citation: Hilary Denis Solomons (2024), Tick bite fever in South Africa (A Rickettsial Disease), *J. Cancer Research and Cellular Therapeutics*, 8(7); DOI:10.31579/2640-1053/213

Copyright: © 2024, Hilary Denis Solomons, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Summary

Tick bite fever has been a constant scenario in South Africa. Only recently has it been established that there are two aetiological agents.

These two agents have different epidemiologies and clinical presentations. They are *Rickettsia conorii* and *Rickettsia Africa*. *Rickettsia Africa* is the milder form of the disease. *Rickettsia conorii* can be fatal! The treatment of choice is doxycycline or tetracycline. Macrolides and quinolones may be of value. [1]

The earliest description of the disease resembling Mediterranean spotted fever or boutonneuse in southern Africa dates back to 1911.

The incubation period for *R conorii* is five to seven days. The eschar is the primary lesion and indicates the site of attachment of the infected tick. It consists of a central necrotic area surrounding inflamed skin. [2]

Clinical presentation may be mild to severe and includes encephalitis, confusion, coma, pulmonary embolism, bleeding, myocarditis, hepatorenal failure and coagulopathy.

References:

1. Troup JM, Piper A. (1931), Tick bite fever in Southern Africa. *Lancet*. ii1183-186.
2. Miller GB, Gear JS. (1984), Treatment of tick bite fever with erythromycin. *SA Med J*; 66; 694-697.

The diagnostic triad consists of eschar, fever and rash. The rash may resemble rubella, measles, secondary syphilis, enterovirus, gonorrhoea, arbovirus, leptospirosis, drug reactions and immune complex disorders.

Serology is often negative and the Weil-Felix agglutination test is obsolete. Specific micro immunofluorescence is the serological method of choice. In complicated diseases neutropenia and thrombocytopenia may be noted, most of the experience of steroids in rickettsial disease may be extrapolated from their use in patients with complicated Rocky Mountain spotted fever. [3]

In conclusion the diagnosis of the South African variety of Tick bite fever can be made if the classic triad of fever, eschar and rash is present. Less typical forms of TBF present with a wide range of clinical features and severity. The treatment of choice is either tetracycline or doxycycline. [4]

3. Loubser, MD, et al. (1993), A severe illness caused by *rickettsia conorii*. *Ann Trop Paediatr*.; 13;277-280.
4. Jensenius M, et al., (2006), Sub acute neuropathy in patients with African tick bite fever. *Scand J Infect. Dis.*, 38; 114-118.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here:

Submit Manuscript

DOI: [10.31579/2640-1053/208](https://doi.org/10.31579/2640-1053/208)

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://auctoresonline.org/journals/cancer-research-and-cellular-therapeutics>