

## Tick bite fever in South Africa (A Rickettsial Disease)

### Solomons HD\*

Hematology, Pathology, University of the Witwatersrand, Ormonde, Johannesburg, South Africa

\***Corresponding author:** Hilary Denis Solomons, Hematology, Pathology, University of the Witwatersrand, Ormonde, PO Box 64203, Highlands North, Johannesburg, 2037, South Africa

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### Commentary

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.

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Serology is often negative and the Weil-Felix agglutination test is obsolete.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 microimmunofluorescence 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].

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