

<b>Zeitschrift:</b>	Acta Tropica
<b>Herausgeber:</b>	Schweizerisches Tropeninstitut (Basel)
<b>Band:</b>	45 (1988)
<b>Heft:</b>	3
<b>Artikel:</b>	Haemorrhagic syndrome associated with "T. vivax" infections of cattle in Somalia : short communication
<b>Autor:</b>	Dirie, M.F. / Wallbanks, K.R. / Molyneux, D.H.
<b>DOI:</b>	<a href="https://doi.org/10.5169/seals-314087">https://doi.org/10.5169/seals-314087</a>

### Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 06.08.2025

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

<sup>1</sup> Department of Biological Sciences, Salford University, Salford M5 4 WT, England

<sup>2</sup> National Veterinary Institute, P.O. Box 1703, Uppsala, Sweden

<sup>3</sup> Afgooye D.V.O., Afgooye, Somalia

## Haemorrhagic syndrome associated with *T. vivax* infections of cattle in Somalia

Short communication

M. F. DIRIE<sup>1</sup>, K. R. WALLBANKS<sup>1</sup>, D. H. MOLYNEUX<sup>1</sup>, S. BORNSTEIN<sup>2</sup>,  
H. A. OMER<sup>3</sup>

Trypanosomiasis, due to *T. congolense* and *T. vivax*, is the main constraint on livestock development in the riverine areas of Somalia. Although in East Africa *T. vivax* infection usually manifests itself as a chronic form of the disease milder than that caused by *T. congolense* (Fiennes, 1950; Stephen, 1970), virulent and haemorrhagic forms have been reported from Tanzania (Cornell, 1936) and Kenya (Hudson, 1944; Mwongela et al., 1981; Wellde et al., 1983).

We report a haemorrhagic syndrome associated with some *T. vivax* infections of cattle in Somalia.

The syndrome is characterized by the rupture of the anterior capillaries in one or both pinnae of infected cattle. Haemorrhagic spots appear and external bleeding starts (Fig. 1). Blood loss may be severe in lactating cows and breeding bulls which often die if untreated. As blood oozes from their ears cattle shake their heads, splattering heads and flanks with blood (Fig. 1). The syndrome is seen throughout the year, but it is more common during the dry seasons. A localization of the disease in certain areas of high tsetse challenge along the Shabelle River (Jilaal Mooge, Libsoma and Geed-faqa) has been noticed. This syndrome has been seen in all local and exotic breeds of cattle. It is very familiar to the stockowners, and they treat these animals for trypanosomiasis without hesitation. In the cases observed bleeding stopped 25–40 min after the inoculation of the animal with a curative dose of Berenil (Hoechst). No haemorrhages were seen on other parts of the body or in the mucous membranes and the colour of the faeces was normal. The presence of *T. vivax* in the blood of the animals with the bleeding syndrome was confirmed by haematological exami-

---

Correspondence: M. F. Dirie, Department of Biological Sciences, Salford University, Salford M5 4WT, England

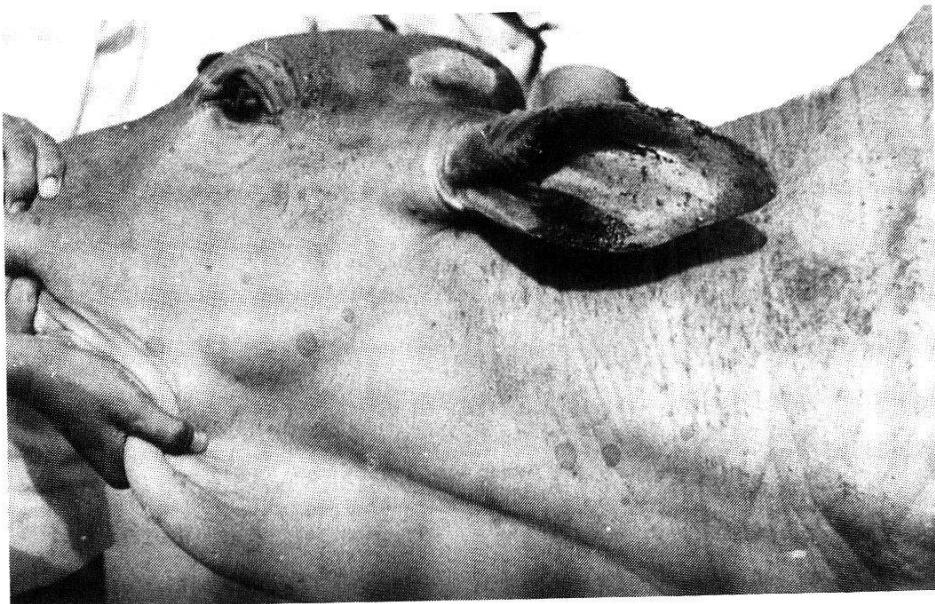


Fig. 1. Head of a bull calf showing extensive haemorrhages on the pinna and splashes of blood on the neck.

nation of Giemsa stained thin blood films. The parasitaemia of 5 animals examined was 2+ or 3+ by the method of Paris et al. (1982).

The syndrome described here differs from that reported from Kenya in being confined to the ears, in the low parasitaemia and the rapid arrest of the bleeding following treatment. The physiological changes and *T. vivax* zymodeme which cause this syndrome, at present apparently limited to Somalia, remain to be investigated.

- Cornell R. L.: Report of the Department of Veterinary Services Tanganyika, 1935, p. 14 (1936).  
Fiennes R. N. T. W.: The cattle trypanosomiasis: some consideration of pathology and immunity. Ann. trop. Med. Parasit. 44, 42–54 (1950).  
Hudson J. R.: Acute and subacute trypanosomiasis in cattle by *T. vivax*. J. comp. Path. 54, 108–119 (1944).  
Mwongela G. N., Kovatch R. M., Fazil M. A.: Acute *Trypanosoma vivax* infection in Dairy cattle in Coast Province, Kenya. Trop. Animal Hlth Prod. 13, 63–69 (1981).  
Paris J., Murray M., McOdimba F.: A comparative evaluation of the parasitology techniques currently available for the diagnosis of African trypanosomiasis in cattle. Acta trop. (Basel) 39, 307–316 (1982).  
Stephen L. E.: Clinical manifestations of the trypanosomases in livestock and other domestic animals. In: The African trypanosomases, ed. by H. W. Mulligan, p. 774–794. George Allen Unwin Ltd, London 1970.  
Welde B. T., Chumo D. A., Adoyo M., Kovatch R. M., Mwongela G. N., Opio E. A.: Haemorrhagic syndrome in cattle associated with *Trypanosoma vivax* infection. Trop. Animal Hlth Prod. 15, 95–102 (1983).