New World relapsing fever *Borrelia* found in *Ornithodoros porcinus* ticks in central Tanzania.

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**ABSTRACT** : Ticks were collected from 8 houses in Mvumi Mission village, near Dodoma, Tanzania. All ticks were examined for *Borrelia* infestation by flagellin gene-based nested polymerase chain reaction. All houses were highly infested with ticks, and all ticks collected were of the *Ornithodoros porcinus* species. Fifty-one out of 120 ticks were infected with spirochetes, and a flagellin gene sequence comparison showed that most of the spirochetes belonged to *Borrelia duttonii*, which is the causative agent of tick-borne relapsing fever in East Africa. The rest of the spirochetes were quite different from *B. duttonii* and instead resembled the New World tick-borne relapsing fever borreliae. Phylogenetic analysis using 16S ribosomal RNA gene sequences also supported the interpretation that the spirochete was a *Borrelia* species distinct from previously described members of the genus.

抄録 タンザニア、ドドマ近郊におけるMvumi mission village 8 家屋から捕獲された*Ornithodoros porcinus* ダニはすべてポレリアを媒介していることが、鞭毛遺伝子を標的としたnested PCR により明らかとなった。120 個体中51 のダニはタンザニアで回帰熱を引き起こす旧世界回帰熱ポレリア*B. duttonii* であったが、それ以外は*B. duttonii* とは異なりむしろ新世界回帰熱ポレリアに近縁なポレリア種であった。これは16S rRNA 遺伝子を基にした系統解析からも指示された。

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