

日本において分離された*B. burgdorferi sensu lato*の
パルスフィールド電気泳動による分析とライム病
スピロヘータとの分類学的関連

福長将仁, 高橋幸江

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**Pulsed field gel electrophoresis analysis of
Borrelia burgdorferi sensu lato isolated in
Japan and taxonomic implications with
Lyme disease spirochetes.**

M. Fukunaga and Y. Takahashi

ABSTRACT Genomic DNAs of *Borrelia burgdorferi sensu lato* isolates obtained in Japan sharing different rRNA gene ribotypes were digested with rare-cutter restriction endonucleases and the fragments obtained were separated by pulsed field gel electrophoresis (PFGE). The sizes of large restriction cleavage bands with *Mlu* I endonuclease were quite similar among isolates in each ribotype group. On the other hand, the PFGE profiles obtained with the other enzymes (*Nru* I, *Sal* I or *Spl* I) were rather divergent, and Japanese isolates were distinguishable from the United States and European isolates. The Japanese isolates classified as ribotypes group II (*Borrelia garinii*) and III (*B. afzelii*) showed different PFGE patterns from that of European isolates. The isolates grouped into ribotype IV revealed distinctively different PFGE profiles. These results indicate that the Japanese isolates may be genetically divergent and distinct from the United States and European isolates.

抄録 パルスフィールド電気泳動によるゲノムDNAの制限酵素切断断片分析の結果、日本において分離されたボレリア (*B. burgdorferi sensu lato*) は、欧米で分離されているライム病関連株とは遺伝的に異なっていることが明らかとなった。