

First Detection of *Brucella abortus* in Camel Serum in Saudi Arabia Using the Polymerase Chain Reaction

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Abstract

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Polymerase chain reaction (PCR) was used to diagnose brucellosis in camels. DNA was extracted from 26 serum samples of camels that tested positive for brucellosis by two or more serologic tests. PCR products indicating the presence of a *Brucella* spp. DNA were detected in all samples with primers that amplify the 31 kDa membrane protein and 18 samples with primers that amplify the 905 bp of the 16S rRNA. Using primers that amplify the IS711 locus 8 samples revealed DNA amplification at around 500 bp, indicating that the organism involved was *B. abortus*. This is the first report on the use of the PCR as a diagnostic tool for brucellosis in the serum of the camel and the first record of *B. abortus* in that animal in Saudi Arabia.

Key words: Brucellosis, camel, PCR, diagnosis, Saudi Arabia.