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ASSOCIATIONS OF BACTERIAL ISOLATION WITH ENDOMETRIAL CYTOLOGY IN CAMELS (*Camelus dromedarius*) WITH ENDOMETRITIS

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ABSTRACT

The objective of the present study was to evaluate uterine cytological examination as a reliable diagnostic tool for camel endometritis in 108 repeat breeding female camels (*Camelus dromedarius*) aged 6–18 years. With the aid of rectal palpation of reproductive tract, vaginal examinations as well as transrectal ultrasonography, 46 camels were diagnosed with clinical endometritis. Bacteriological swabs and low volume uterine lavage were collected for bacteriological and cytological analysis, respectively. Bacteriological growth could be identified in 65% (30 swabs) of investigated samples. No growth was reported in 35% (16 swabs) of the investigated samples. With 9 and 8 positive swabs, *Staphylococcus aureus* and *Escherichia coli* were responsible for the majority of uterine infections within studied animals. Cytological analysis revealed that the cellular contents of studied samples were significantly different according to isolated bacterial species. In our study, five cases (11%) of studied animals were negative for both cytological and microbiological examination, whereas 29 cases (63%) were positive in bacteriology and cytology. The compatibility in the bacteriological and cytological results in the case of both positive or negative in present study appeared in 74% of animals. In 24% of studied animals there was an absence of bacterial growth on the culture, though these samples were positive for cytology. Our study confirmed the importance of combined employment of cytological and bacteriological results in the diagnosis of endometritis in dromedary camels.

Key words: Bacteria, camel, cytology, endometritis