

EVALUATION OF BACTERIAL AND FUNGAL FLORA IN HEALTHY FEMALE REPRODUCTIVE TRACT OF CAMELS (*Camelus dromedarius*)

I.M. Ghoneim^{1,2}, M.M. Fayez^{3,4}, M.M. Wahid^{1,2} and W. El-Deeb^{1,5}

¹Department of Clinical Sciences, College of Veterinary Medicine, King Faisal University, Al Ahsa 31982, Saudi Arabia

²Department of Theriogenology, Faculty of Veterinary Medicine, Cairo University, Giza, Egypt

³Al Ahsa Laboratory, Ministry of Agriculture Kingdom of Saudi Arabia, Al Ahsa, Kingdom of Saudi Arabia

⁴Veterinary Serum and Vaccine Research Institute, Cairo, Egypt

⁵Department of Veterinary Medicine, Infectious Diseases and Fish Diseases, Faculty of Veterinary Medicine, Mansoura University, Mansoura, Egypt

ABSTRACT

Swab samples for microbial culture were obtained from the vaginae, cervices and uteri of 10 healthy fertile dromedary camels. Swab specimens were collected by use of a double-guarded uterine equine swab. Specimens were cultured for aerobic and anaerobic bacteria as well as fungus. The 90%, 50% and 30% of the swabs collected from the vaginae, cervices and uteri were contaminated, respectively. The difference between the rate of contamination was significant ($P < 0.05$). Coagulase-negative *staphylococci*, *Staphylococcus aureus*, *Streptococcus* spp., *E. coli*, *Bacillus* spp. and *Proteus* spp. were isolated from the samples collected from the vaginae of camels. Coagulase-negative *Staphylococci*, *Streptococcus* spp. and *Bacillus* spp. were identified in the swabs collected from the cervices. Coagulase-negative *Staphylococci* and *Bacillus* spp. were isolated from the swabs collected from the uteri. Double and triple infections were only reported in the samples collected from the vaginae. No anaerobic bacteria could be isolated from the vaginae, cervices or uteri. *Candida albicans* and *Cryptococcus* were isolated from the vaginae. Only *Candida albicans* could be isolated from cervices and uteri. This study identified a great microbial population's diversity in the vagina which decrease toward the uterus. Coagulase-negative *Staphylococci* and *Bacillus* spp. were the dominant bacteria isolated from the vaginae, cervices and uteri.

Key words: Bacteria, camel, fungus, microflora, reproductive tract