Ovarian hydrobursitis in female camels (Camelus dromedarius):  
2. Clinical findings, histopathology and fertility after unilateral 
surgical ablation.

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Abstract:

This study was undertaken to verify the clinical signs, incidence, location, etiology and pathology of ovarian hydrobursitis in infertile female camels and estimate the fertility after unilateral surgical ablation. Genital organs (n = 124) were examined in camels slaughtered at Makkah abattoir during Hajj of 2009. Infertile female camels (n = 142) presented for management to the Veterinary Teaching Hospital, Qassim University, Saudi Arabia, were clinically examined and ultrasound-scanned for the diagnosis of genital abnormalities. Twenty eight camels diagnosed with ovarian hydrobursitis were further investigated for the effect of unilateral surgical ablation on breeding outcomes. Surgical ablation was carried on 14 cases (treated group), the remaining 14 cases were followed as controls (control group). Both groups were observed for breeding results: 90 days non-return rate (90d NRR) and calving rate (CR). Removed bursae were sent to the laboratory for histopathological investigation. Results showed that the incidence of ovarian hydrobursitis was 6.5% in slaughtered camels and 33.8% in infertile females. Camels with hydrobursitis were concurrently affected with pyometra, uterine and vaginal adhesions or purulent endometritis. Histopathology reported degeneration and hyperplasia of the lining epithelium, mononuclear cells infiltration, focal aggregation of inflammatory cells, cystic dilatation of multi-acinal structures, tiny hemorrhages, and presence of hemosiderin-laden macrophages. The 90d NRR and CR of the surgically-treated cases were 64.3% and 50%, respectively. None of the untreated cases conceived. These results confirmed that ovarian hydrobursitis causes infertility in dromedary female camels and is associated with inflammatory genital conditions and surgical ablation in unilaterally affected animals presents a potential treatment.

Keywords:

Female camels; Ovarian hydrobursitis; Histopathology; Surgical treatment; Fertility

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