

Detection of *Brucella melitensis* in seropositive goats.

ABSTRACT

This study reports an association of *Brucella melitensis* with pathological changes in seropositive goats. 1,054 serum samples were subjected to the Rose Bengal Precipitation Test (RBPT) of which 27 were positive. Serum samples were re-collected from the 27 seropositive goats 2 weeks later and subjected to RBPT for antibody titres. Uterii, mammary glands and supra-mammary lymph nodes were examined for pathological changes, immunoperoxidase (IP) staining, bacterial isolation and PCR to detect *B. melitensis*. Results revealed that of the 27 goats tested, 41% were Category I (antibody titre = 2), 33% Category 2 (titre = 4) and 26% Category 3 (titre = >4). Goats in Categories 2 and 3 revealed more severe pathological changes with the latter being most severe. All goats in Category 3 showed positive reaction to IP compared with 56 and 18% in Categories 2 and 1, respectively. Three (33%) goats in Category 2 and 3 (43%) goats of Category 3 were *B. melitensis* positive either by isolation or PCR. There was strong correlation between the antibody titre, pathological lesions and presence of *B. melitensis*.

Keyword: *Brucella melitensis*; Goats; Detection; Pathological changes.