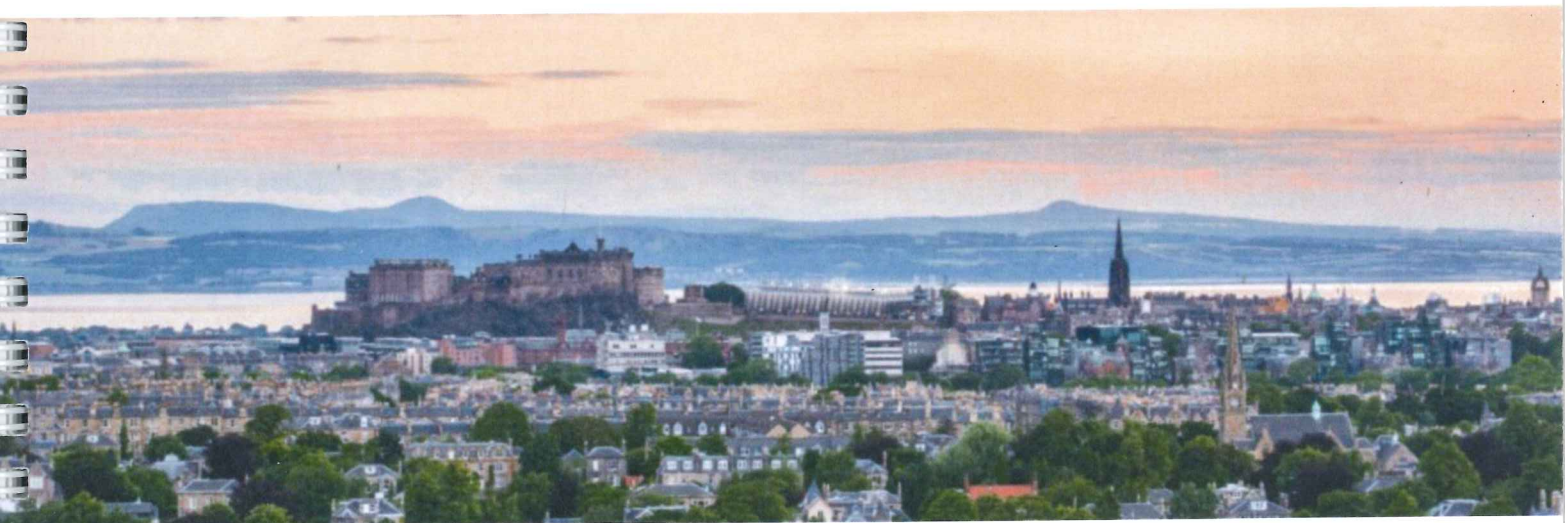




Proceedings



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***Toxoplasma gondii* experimental infection in pregnant sheep at early, mid and late gestation. Pathological response and parasite distribution.**

P06

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The relation between gestational age and foetal death risk in ovine toxoplasmosis is already known, but the mechanisms involved are yet not clear, especially in sheep. In order to study these mechanisms, pregnant sheep of the same age and genetic background were orally dosed with 50 oocysts of *T. gondii* (M4 isolate) at days 40 (G1), 90 (G2) and 120 (G3) of gestation. In each group, four animals were culled on the second, third and fourth week post infection (wpi) in order to evaluate parasite distribution and loads and lesions in target organs. There were no significant differences between groups in either rectal temperatures, with a peak temperature at days 6 and 7 pi, or serological maternal antibody kinetics. Parasite DNA and lesions were found in the placentomes and foetal viscera of sheep from G1 only at the fourth wpi. In G2, parasite was found from the third wpi, also in placenta and foetal viscera, increasing both at the fourth week, but lesions were only present at the fourth wpi. These lesions were the most severe found in whole experiment. In G3, parasite DNA but also placental and foetal lesions were found in the third wpi. Three out of four sheep from G3 aborted at this time. At the fourth wpi, parasite burden in G3 foetal viscera was lower than those on G1 and G2. These results suggest that the period of gestation influence the parasite multiplication and development of lesions in the placenta and foetus, and as a consequence the clinical course in ovine toxoplasmosis.