

PARATUBERCULOSIS HISTOPATHOLOGICAL STUDIES IN PORTUGUESE SHEEP FROM SERRA DA ESTRELA REGION

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The purpose of this study was to establish a rapid and efficient protocol for paratuberculosis diagnosis in sheep from Serra da Estrela region, which will support the identification of infected herds and future control programs. Necropsy and anatomic-histopathological analysis were performed to 34 animals, 30 of them previously submitted to ELISA and AGID screening tests. The presence of macroscopic and microscopic lesions, acid-alcohol resistant bacteria and MAP antigens using anti-MAP antibodies was recorded. Several other diagnostic features were studied and correlated with each other: the presence of clinical signs, serological results before necropsy, macroscopic and histopathological lesions, Ziehl-Neelsen staining results and immunohistochemistry tests.

From the 34 animals submitted to necropsy, 16 were ELISA positive, 1 inconclusive and 12 negative; AGID test was positive in 4 animals and negative in 26. Twenty-seven animals showed compatible clinical signs. Characteristic histopathologic lesions were only present in 21 animals. The presence of acid-alcohol resistant bacteria were recorded in histopathological preparations of 18 animals. Preliminary results indicate that immunohistochemistry is a valuable complementary diagnostic tool. Results were able to establish the concordance between the different diagnostic tests performed.