ABSTRACT

The following study describes the microscopic changes in the lungs of wild animals in Kenya suffering from lungworm infection and other diseases caused by other pathogens. Verminous pneumonia was the most common lesion observed, encountered in 1/17 Grant's gazelles, 8/11 Thomson's gazelle, 21/29 hartebeest, 7/12 impalas, and 2/22 wildebeest. Other changes observed included calcified lung abscesses in wildebeest and zebra, and interstitial pneumonia in wildebeest, impalas and hartebeest. Verminous pneumonia was grossly characterized by the presence of nodules in the lungs, and microscopically by varying intensities of cellular infiltration, primarily by mononuclear cells and occasionally by either neutrophils or eosinophils, in the nodules. Interestingly, worm eggs were observed in the epithelium and subepithelial tissues of the air passages and lung interstitium. In these locations, the eggs were not associated with any inflammatory reaction, but seemed to be associated with hypertrophy and hyperplasia of the air passage epithelium. Interstitial pneumonia was microscopically characterized by alveolar wall thickening and lymphoid proliferation around blood vessels, bronchi and bronchioles.