Abstract

Salmonella enterica serovar Typhimurium and Cholerasuis are potentially zonootic pathogens that cause porcine salmonellosis; a disease associated with economic losses worldwide. Presence of this disease in pigs in Kenya is largely unknown. Two, 11-week old pig carcasses presented for necropsy to the Department of Veterinary Pathology, Microbiology and Parasitology were used in this study. Clinically, the pigs were depressed and developed yellowish diarrhea that was refractory to antimicrobial treatment. Systematic necropsy was conducted on the carcasses. Lung and colon samples were collected aseptically for bacteriology analysis. Other samples collected were lymphoid tissues, lungs, heart, liver, kidneys and gastrointestinal tract which were fixed in 10% formalin and processed routinely for histopathlogy examinations. Salmonella enterica serovar was isolated from lungs and colon. At post mortem, the significant findings included: emaciation and cyanosis of extremities, increased fluids in body cavities, generalized fat atrophy, enlarged lymphoid organs, congested and edematous lungs, epicardial hemorrhages, red renal infarct and miliary white foci randomly distributed in the liver. Histopathological examination revealed presence of macrophages in lymphoid tissue sinuses, pulmonary edema, infiltration of inter-alveolar septae by mononuclear cells, myocardial thrombosis and necrosis, glomerulonephritis, tubular nephrosis and multifocal areas of coagulative hepatic necrosis. In conclusion, the report documents the occurrence of systemic salmonellosis that resulted in mortality of the two pigs. The disease might be more widespread, and the herd status and the serovars involved in Kenya should be established.