Progressive atrophic rhinitis in a medium-scale pig farm in Kiambu, Kenya.

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Abstract

Forty-two pigs in a herd of 117 displayed various clinical signs of progressive atrophic rhinitis. The main signs included sneezing, coughing, lachrymation, serous to mucopurulent nasal discharge, and nasal bleeding in 1 pig. Three pigs had lateral deviation of the snout, while 4 had brachygnathia superior with obvious deformation of the face. Four acutely affected weaner pigs appeared weak, while the 7 chronically-affected pigs appeared smaller than their apparently unaffected penmates of the same age. Treatment of the acutely affected pigs with long-acting oxytetracycline at 20 mg/kg body weight intramuscularly, repeated once after 7 days, reduced the severity but did not clear the sneezing from all the pigs. Fifteen pigs were slaughtered 2 months after the clinical diagnosis was made. The carcasses of the chronically affected pigs were about 15% lighter than those of the apparently normal pigs of the same age and from the same pen, which translated to a loss of 921.00 Kenya shillings per pig (US$13.7). Diagnosis of progressive atrophic rhinitis was confirmed by sectioning the snouts of randomly selected slaughtered pigs with obvious deformation of the snout. Sections were made at the level of the 1st/2nd upper premolar tooth. Varying degrees of turbinate atrophy, from mild to complete, were noted. Histopathology of the turbinates revealed metaplasia of nasal epithelium and fibrosis in the lamina propria.