Abstract

Kidney lesions are an important cause of tissue condemnation in slaughterhouses. In addition to the potential public health implications, organ condemnations have a significant economic impact on the food animal industry. The condition classified broadly as “nephritis” is one of the main causes of tissue condemnation. Embolic nephritis resembling Actinobacillus equuli infection in foals has been recently detected in sows and market hogs. Actinobacillus suis is phenotypically and phylogenetically closely related to A. equuli. Both are Gram-negative bacteria, not easy to detect in routine exams. A. suis is an opportunistic pathogen that can produce fatal septicaemia in pigs, pneumonia, polyarthritis, septic embolic nephritis, abortion and mummified foetuses. Outbreaks of clinical disease appear to occur more frequently in high-health-status herds. In adult pigs the skin lesions may be confused with porcine erysipelas. A. suis and A. equuli are emerging opportunistic pathogens in the porcine industry and both have potential public health consequences to people that handle meat products. The objective of this paper is to present a literature review regarding the role of A. suis and A. equuli in the pathogenesis of nephritis in swine.

Keywords

Actinobacillus suis, Actinobacillus equuli, nephritis, swine.