

Introduction

Coliform mastitis is a puerperal mastitis of the pig that has a global distribution. In a large Danish survey the condition was seen at almost 10% of farrowings. Coliform mastitis can be caused by various bacteria such as E. coli, Klebsiella, Enterobacter and Citrobacter but, of these, E. coli is the most common isolate.

Epidemiology and pathogenesis

Coliform mastitis is non-contagious and many pig operations have their own particular causal bacterium. Infection originates from the sow or her environment and, in the case of the latter, urinary or faecal contamination of her immediate surroundings is significant. Pathogenesis centres around bacterial invasion of the udder and coliform mastitis is typified by a massive accumulation of inflammatory cells in the lumina of the mammary glands. When the bacterium causing the mastitis produces endotoxins systemic clinical signs are seen. Coliform mastitis does not result in immunity that is capable of protecting against homologous reinfection.

Clinical signs

The first signs include listlessness, inappetence, weakness, a loss of interest in the piglets and an elevated body temperature. Affected sows tend to lie on their sterna. The appearance of undernourished piglets which try to suckle and move from nipple to nipple is also seen, Udder tissue is firm and palpation may cause pain. Hypoagalactia at the beginning of lactation is suspicious of coliform mastitis.

Treatment

Therapeutic intervention rarely occurs before milk loss so the benefit of treatment for the piglets is at best a shortening of their period of underfeeding Antibiotic therapy is complicated by the varying patterns of antibiotic sensitivity seen in causal organisms. Antibiotics are administered by injection. Supportive therapy, such as cross fostering or the use of milk substitutes, needs to be given to the piglets. When the piglet is receiving inadequate milk, protection against chilling is very important. Prevention centres around hygiene, the nutrition of the sow (reduction in feed intake shortly before parturition) and prophylactic medication, although this latter practice is now condoned in some countries.