

Pighealth BYTES

Number: 194

Urinary tract infection

Your own reference source on pig health



CID Lines

Henke-Sass Wolf

IFF

Interheat

LUBING

Olmix

Special Nutrients

Wisium/Neovia

Introduction

Urinary tract infections occur when microbial infection invades a normally sterile part of the urinary tract. Urinary tract infections can be subclinical (no signs) or clinical in which signs are present. Typically some 15-17% of culled sows show bladder bacterial colonisation and of these >80% show lesions of cystitis (bladder disease). Sows that develop mastitis-metritis-agalactia and reproductive disorders show a higher incidence of urinary tract infection in their preceding gestation.

Various bacteria, including *E. coli*, *Streptococcus*, *Klebsiella*, *Pseudomonas*, *Aeromonas*, *Bacteroides* and *Enterococcus*, can be associated with this condition, as well as *Actinobaculum suis* which causes a specific syndrome which will be considered later in this series.

Pathogenesis

It is assumed that most infections ascend the urinary tract and originate from outside the sow. This is favoured by the sow's short, wide urethra and the fact that its sphincter muscle relaxes in late pregnancy, at birth, as a consequence of trauma, at coitus and at parturition.

The condition can include urethritis, cystitis, and pyelonephritis.

Clinical signs and lesions

Often no clinical signs are seen. Affected sows tend to have smaller litters, increased intervals between litters, lower fertility and poorer bodily condition. Affected sows tend to urinate small volumes of urine more frequently and can squat like a dog. Vulval discharges may be seen and dried deposits can be seen around the vulva and on the underside of the tail, as well as on the floor behind the sow. Excessive discharges are more typical of endometritis than urinary tract infection. Severe pyelonephritis most commonly occurs in the 14 days following parturition.

Most affected sows show cystitis (bladder inflammation) and about half show a pyelonephritis.

Diagnosis

Diagnosis is based on presenting clinical signs, post mortem findings and examination of the urine for protein, blood, haemoglobin and pH.

Treatment

Treatment is with antibiotics with success dependent on the bacterial type involved and its antibiogram (antibiotic sensitivity profile). Some veterinarians recommend prophylactic antibiotics shortly before parturition.