Lesions seen in PIS/PCS

The initial gross lesions of porcine intestinal spirochaetosis/porcine colonic spirochaetosis can be very subtle and easily missed and are found in the colon and caecum. Quite quickly the colon and caecum become fluid filled (watery green or yellow) and quite flaccid with an oedematous serosal surface and enlarged colonic and mesenteric lymph nodes. There may be mild congestion of the mucosal surface with some erosions and foci of necrosis. As the condition progresses inflammation and a mucohaemorrhagic colitis are often seen. When the condition becomes chronic healing lesions are often covered with fibrin and necrotic material.

Diagnosis

Diagnosis is based on clinical picture, post mortem examination, immunohistochemistry and the demonstration of Brachyspira pilosicoli and can be assisted by PCR testing. There are no routine commercial testing kits available.

Differential diagnosis

The clinical signs of PIS/PCS are very similar to those of proliferative enteropathy, salmonellosis, post weaning colibacillosis, yersiniosis, swine dysentery, PCV2 enteritis and trichuriasis.

Immunity

The immune mechanisms against this disease are poorly understood.

Prevention and control

Treatment and control of PIS/PCS is very similar to the approaches used for swine dysentery. Antimicrobials can be used to reduce infections and maintain production and include tiamulin, valnemulin, carbadox, dimetridazole and lincomycin.