Zuku Review FlashNotes™

Colibacillosis
Condensed Version

**Presentation:** Swollen, dying, recently weaned piglets.

PIGS #1 **Edema disease**, gut edema, or bowel edema in pigs
- Healthy, well-conditioned, 1-2 weeks after weaning
- High-protein diet, changes in diet,
- Weaning, mixing pigs loss of intestinal milk antibodies
- Peracute death
- CNS involvement (ataxia, paralysis, recumbency)
- Periocular edema, swelling of forehead, and submandibular region

PIGS #2 **Enteric colibacillosis** in pigs
- Nursing and weanling pigs
- Profuse watery diarrhea, rapid dehydration, acidosis, death

**Colisepticemia** of calves and lambs
- Calves less than 1 week old, more common in dairy calves
- Septic shock (listlessness, lack of interest in nursing, depression)
- Collapse, recumbency, coma
- Loose, mucoid feces – usually not severe diarrhea

**Poultry colibacillosis**
- Acute fatal septicemia
- Subacute pericarditis and airsacculitis

**Test of choice:** Clinical signs, necropsy lesions, culture, PCR of specific, pathogenic antigens

**Rx of choice:** Early use of antibiotics, supportive care for septic shock, often ineffective

**Prognosis:** Poor

**Pearls:**

**Edema disease:** Hemolytic *E coli*
- F18 pili and Shiga toxin 2e (Stx2e)
- Some pigs carry a specific mutation are resistant to infection.

**Enteric colibacillosis:** Enterotoxigenic *E coli* K88 and 987P strains

**Poultry colibacillosis:** Usually non-hemolytic strains of *E coli*

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**Zuku Review FlashNotes™ Classic Question(s)**

List 4 predisposing factors for edema disease in newly-weaned pigs.

List 4 common clinical signs in a calf with colisepticemia.
List 4 common clinical signs in a pig with edema disease.

What is the name of the toxin produced by *E coli* in edema disease?

Name an enterotoxigenic *E coli* strain in enteric colibacillosis in pigs.