

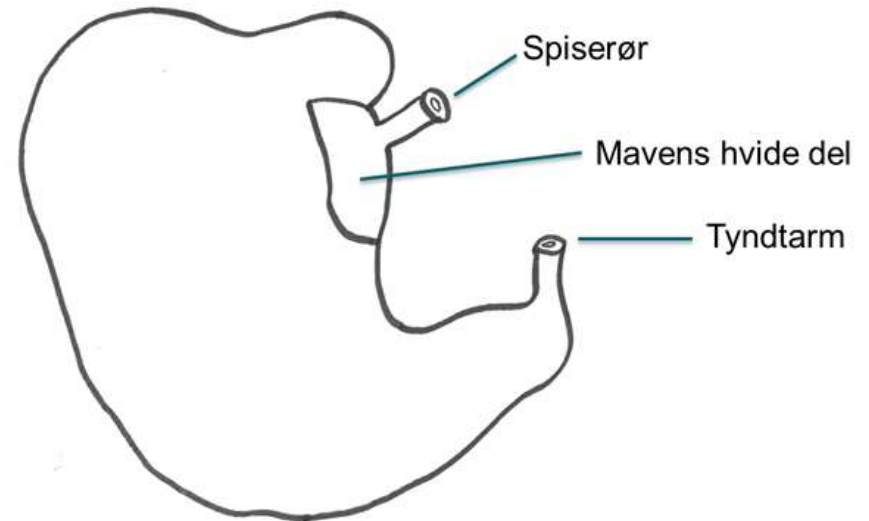
Diseases 2



- ▶ Stomach
 - Stomach ulcer
- ▶ Liver
 - Worms
- ▶ Intestines
 - Generalized intestinal bleeding
 - Porcin Proliferative Enteritis

Stomach

- ▶ Normal stomach



Stomach ulcer



- ▶ Stomach ulcer is caused by acid exposure of the white unprotected part of the stomach
 - Sick animals are at higher risk (PCV2, PRRS)
 - To fine grinding of the feed
 - > the stomach content is too fluid
 - > exposure of the white part
 - > corrosion
 - > stomach ulcer

Stomach ulcer



- ▶ Autopsy findings
 - Chronic ulcer – notice the "ridge"



Stomach ulcer



▶ Autopsy findings

- Bleeding ulcer
 - Notice digested blood in the intestines



Stomach ulcer



- ▶ Autopsy findings
 - Enlarged heart



Stomach ulcer



▶ Symptoms

- Pale pigs
- Wasting
- Fast breathing
- Increased mortality

Stomach ulcer



▶ Diagnosis

- Not possible on live animals
- Slaughterhouse evaluation of stomach
 - Index from 0 to 10

0	Normal
1-3	Keratinization
4-5	Erosion
6-8	Wound and/or scars after wounds
9-10	Narrowing of esophagus

Stomach ulcer



▶ Diagnosis



Stomach ulcer



▶ Diagnosis



Stomach ulcer



▶ Diagnosis

- If the slaughter house index is above 8 the daily gain is decreased 100 g



Stomach ulcer



- ▶ What do we do?
 - Prevention is important
 - Recommended grinding degree is 60–70 % of particles under 1mm, 30–40 % is 1–2mm
 - Control slaughter house index at least once a year
 - Healing is slow and often end in closure between esophagus and stomach
 - > the pig will die of hunger



Liver



▶ Normal liver



Worms, *Ascaris suum*



- ▶ Adults are found in the small intestine and transitorily in the large intestine during expulsion of the worms
- ▶ Large numbers of eggs are produced
- ▶ The eggs are highly resistant to chemical agents. Under optimal conditions, eggs may survive for 5–11 year
- ▶ When the eggs are ingested, the larvae hatch in the intestine, penetrate the wall, and enter the portal circulation

Worms, *Ascaris suum*

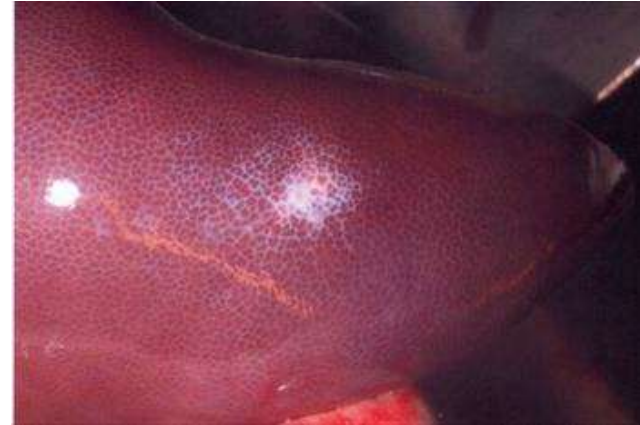


- ▶ After a short period in the liver, they are carried by the circulation to the lungs
- ▶ Approximately 9–10 days after ingestion, the larvae pass up the bronchial tree, are swallowed, and return to the small intestine
- ▶ 0–15 days after infection they mature into adult worms
- ▶ The first eggs are passed ~ 6–7 week after infection

Worms, *Ascaris suum*



▶ Autopsy findings



Worms, *Ascaris suum*



▶ Symptoms

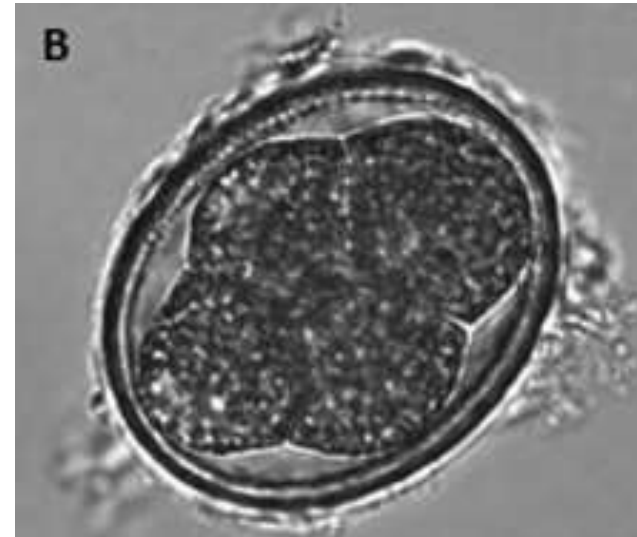
- Decreased growth
 - Under normal circumstances not seen in indoor production (slatted floor)
- Migration of larvae through the liver → “milk spots”
 - Lesions become visible 7–10 days after infection and will regress within 1–4 weeks
- If heavily infected, respiratory signs can be seen

Worms, *Ascaris suum*



▶ Diagnosis

- Feces sample
 - Egg count
- Autopsy
- Worms can be found in the manure



Worms, *Ascaris suum*



- ▶ What do we do?
 - Less amount of slatted floor and more loose housing of pigs/sows ->
 - more contact with manure ->
 - higher risk of contact with egg ->
 - higher risk of infection
 - Treatment can be necessary

Intestines



- ▶ Normal intestines



Generalized intestinal bleeding



- ▶ Causing sudden death in ex finishers
 - A common disease caused by toxins in the food
 - Pigs die shortly after feeding – stomach is filled up with food
 - Often affects big healthy pigs
 - Typically caused by:
 - Dirty food tank (liquid food) and dirty pipes
 - Hot dry food → moist food in silo → molding food
 - Dirty pipes → molding food
 - Biofilm in wet systems (occurs often when using fat in food) → toxins

Generalized intestinal bleeding



▶ Autopsy findings



Quick autopsy: Cut into the abdomen right behind the belly button. Fresh blood indicates generalised intestinal bleeding.

Generalized intestinal bleeding



- ▶ Symptoms/ diagnosis
 - Sudden deaths – no symptoms in live pigs/sows
 - Diagnosed by autopsy

Generalized intestinal bleeding



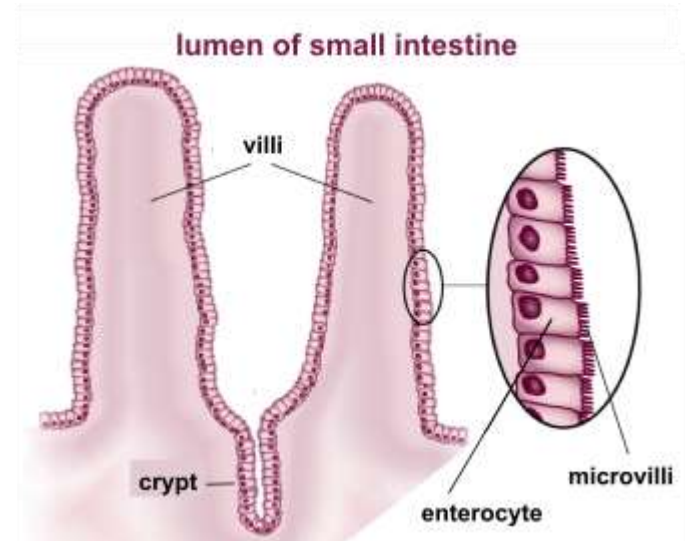
- ▶ What do we do?
 - No treatment
 - Prevention
 - Hygiene, hygiene and more hygiene!



Porcin Proliferative Enteritis



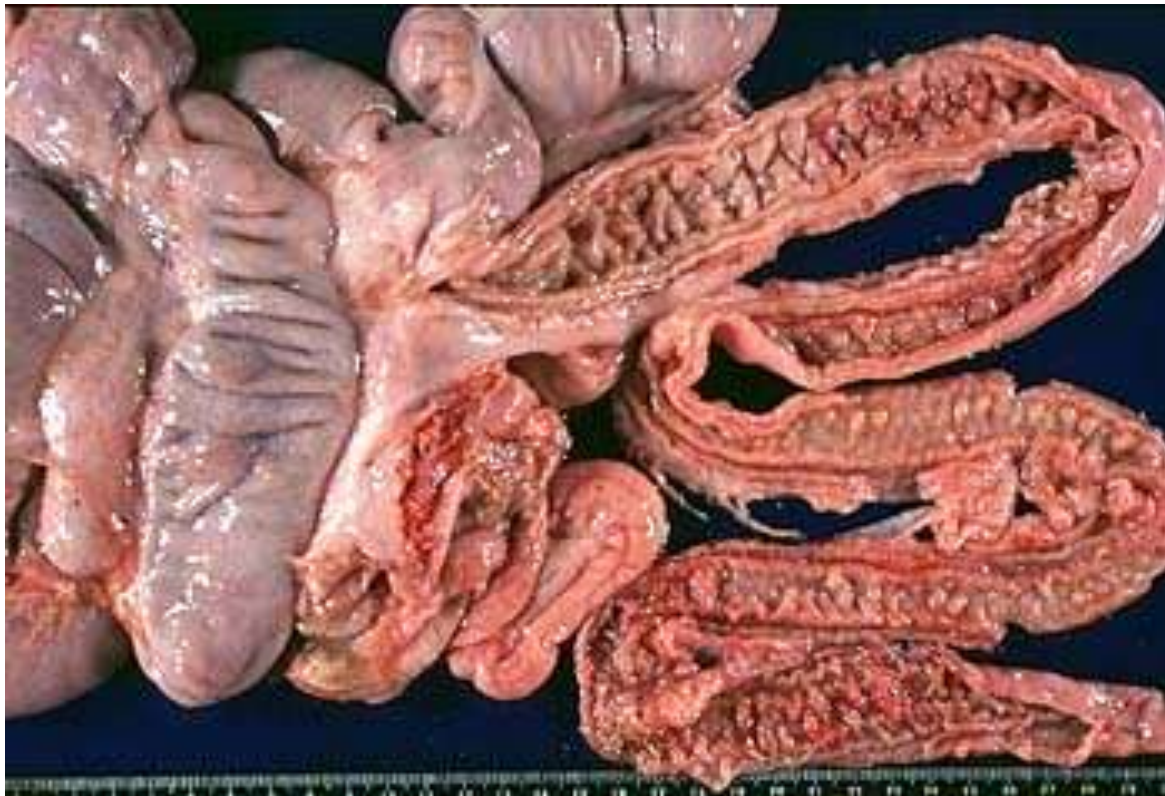
- ▶ Caused by a bacteria *Lawsonia intracellularis*
 - Common disease in Danish pig production
 - Lawsonia bacteria enters the crypt cells in ileum and start to multiply → cells start a progressive proliferation (mechanism unknown)



Porcin Proliferative Enteritis



- ▶ Autopsy findings



Porcin Proliferative Enteritis



▶ Symptoms

- Diarrhea
- Wasting
- Decreased daily gain
 - Increase with higher amount of bacteria
 - In one trial piglets daily gain were reduced 150 g and the feed consumption was increased 1,2 FEs/kg

Porcin Proliferative Enteritis



▶ Diagnosis

- Feces sample
 - From rectum
 - From pen – ” socket sample”



Porcin Proliferative Enteritis



- ▶ What do we do?
 - Prevention
 - Correct flow
 - Hygiene, hygiene and more hygiene!
 - Vaccination
 - Treatment

Questions?



***I THINK I'M
CONFUSED.***



***OH WAIT,
MAYBE I'M NOT.***