

Strep-infections

Prevention and handling

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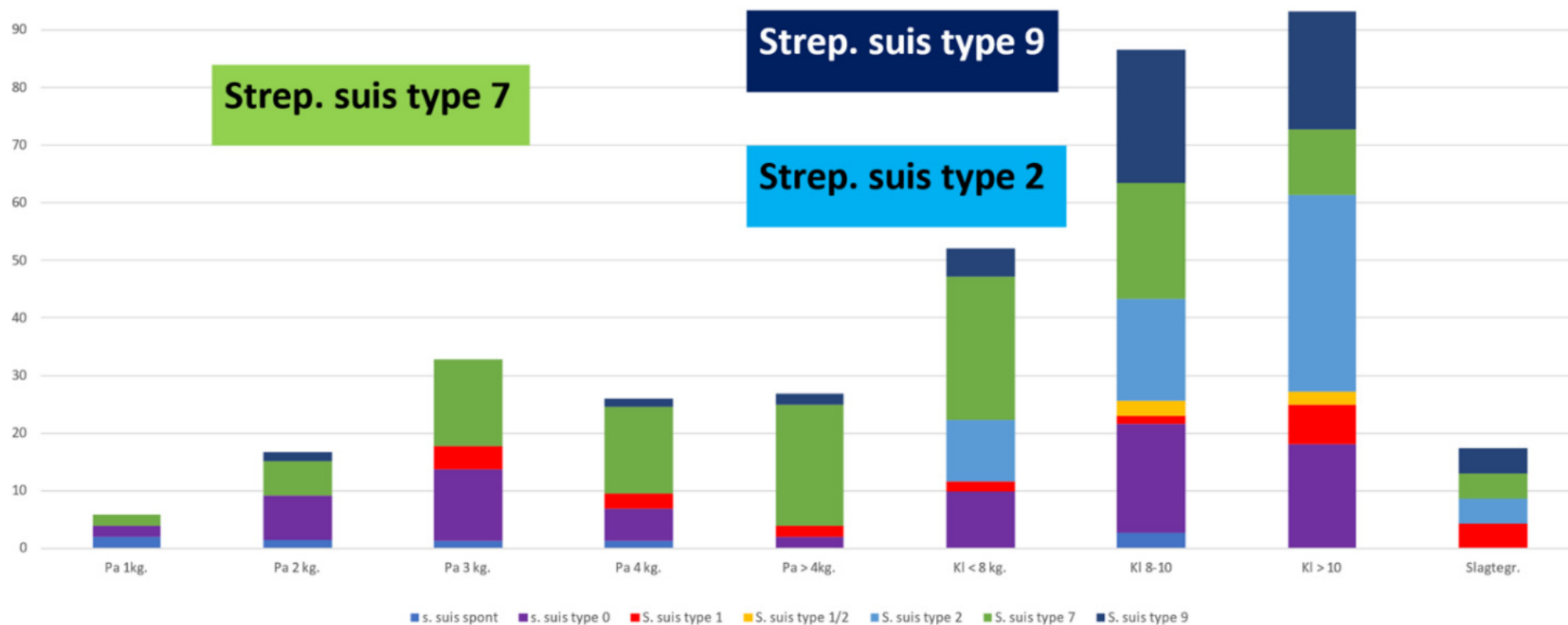


Streptococcus suis

What, where, why?

- A common bacteria found in both sick and healthy pigs
- Many different types. Type 2, 7 and 9 predominates in Denmark at this moment

01.01.2021-31.08.2023: 587 pigs with sepsis diagnosis in Kjellerup Laboratory (Svend Haugegaard)



1 kg. 2 kg. 3 kg. 4 kg.

>4kg. <8 kg.

8-10 kg. >10 kg. Slagtesvin

Streptococcus suis

What, where, why?

- Healthy pigs can carry the bacteria (throat, gut, skin, genitals)
- Zoonosis – can transmit to humans

Symptoms

Relevant in many disease patterns

- Arthritis
- Sepsis
- Meningitis
- Endocarditis
- Pneumonia

Athritis



Meningitis/sepsis



Endocarditis



Pneumonia



Diseases that might look the same

- Edema disease
- Glässer
- Other types of sepsis (fx coli)
- Salt poisoning (lack of water)

Edema disease



Glæsser – *Haemophilus parasuis*



- "Transportation syndrome"



Other types of sepsis



Salt poisoning (lack of water)



Transmission of streptococcus suis

- From the sows genitals at farrowing
- From the sows udder during lactation
- From other pigs (droplet infection)
- From shared items (needles, oral dispensers, feed, milk and water trays, water nipples, equipment for castration, etc.)

Stable factors that escalates the problem in the farrowing unit

- Poor ventilation
- High humidity
- High level of dust
- High level of ammonia
- Poor hygiene
- Temperature variations
- Draft

Management factors that escalates the problem in the farrowing unit

- Man-made procedures: injections, teeth grinding, castration wounds, tail docking, ear cuts, handling of umbilical cord, giving oral supplies
- Hygiene, education and correct/sufficient equipment are crucial!

Management factors that escalates the problem in the farrowing unit

- Pig made wounds: face biting, knee scratching, nail crushing, damage from inventory
- Avoid hungry pigs and frustrated sows, repair floor and other inventory in time, keep floor dry and clean

Management factors that escalates the problem in the farrowing unit

- Cross fostering
- Hunger
- Dehydration
- Late and insufficient treatment of sick pigs
- Dirty supply of feed and water/milk/yoghurt

Pig level factors that escalates the problem in the farrowing unit

- Stress from other infections
- Lack of protection from maternal antibodies
- Bring down stress from other infections (fx Flu, Ap). Diagnose and vaccinate
- Colostrum is essential for immunity

Stable factors that escalates the problem after weaning

- Lack of proper wash, disinfection, drying out and heating up before introduction of pigs
- Poor ventilation (humidity, dust, ammonia)
- Poor hygiene
- Temperature variations
- Draft

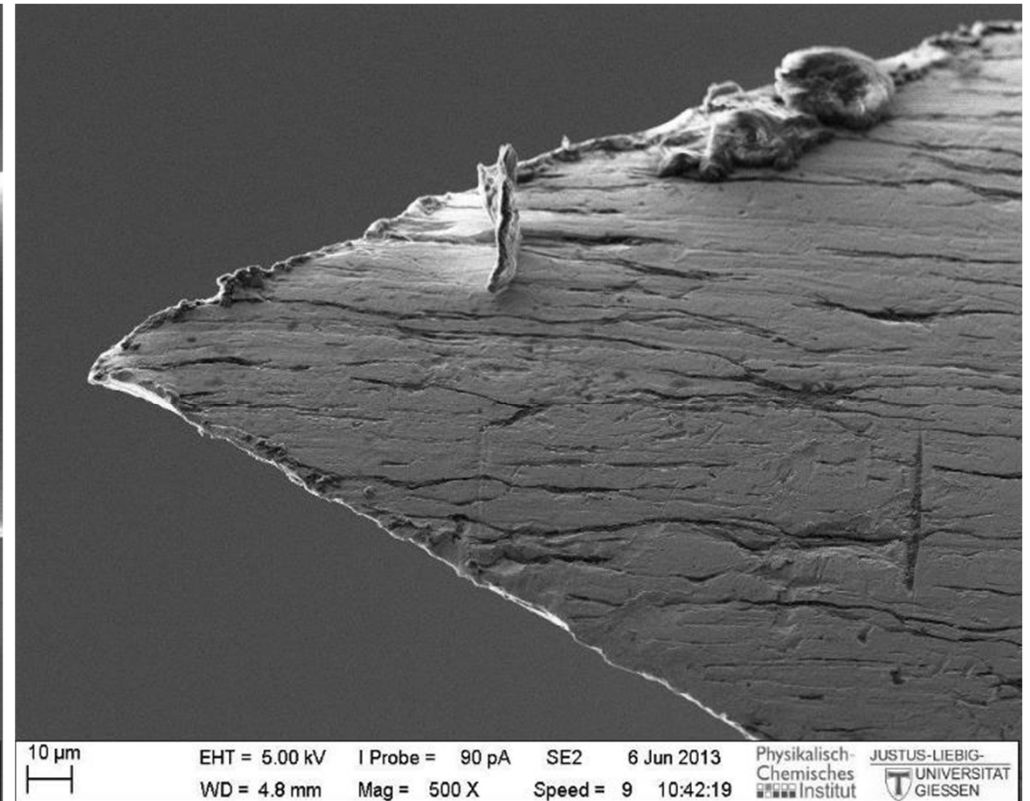
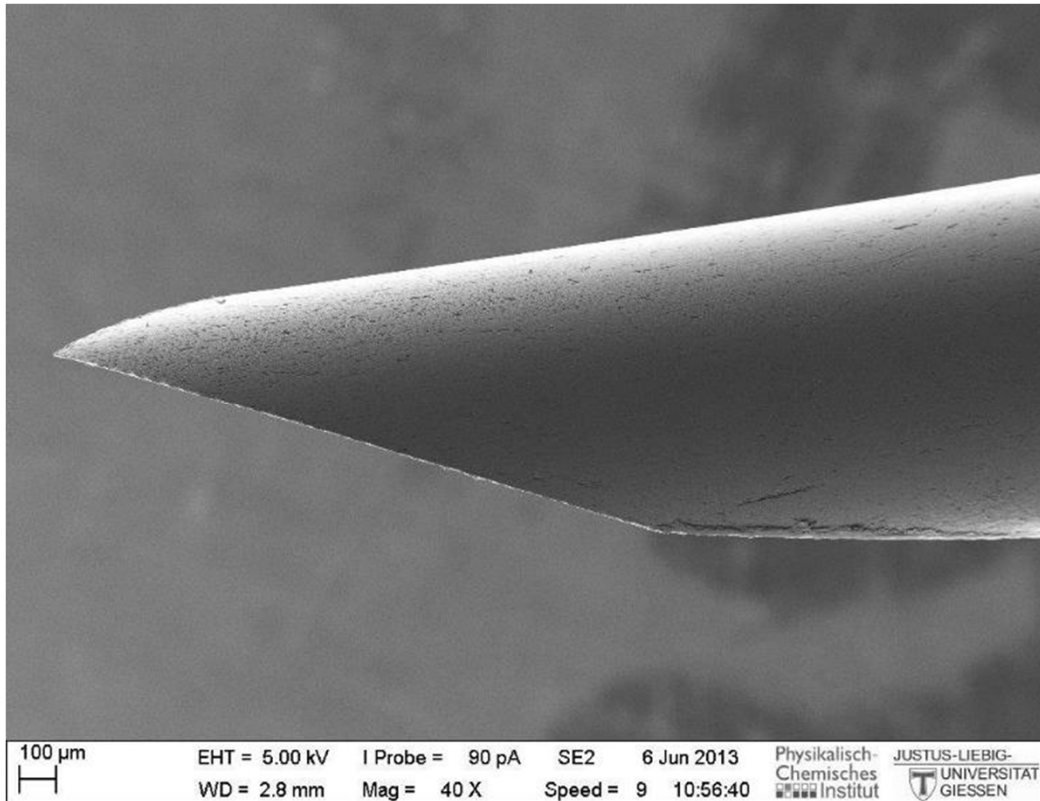
Management factors that escalates the problem after weaning

- Insufficient feed training during lactation
- Feed not suitable for age group
- Low vitamin E level
- Dehydration. Acces to water too difficult
- Dirty supply of feed and water

Management factors that escalates the problem after weaning

- Overcrowding
- Late and insufficient treatment of sick pigs
- Sick pigs not seperated from healthy
- Needles are not changed often enough

New versus used needle



Pig level factors that escalates the problem after weaning

- Pigs are too young for weaning
- Mixed age groups
- Stress from other infections
- Diarrhea opens the gut for blood infection
- Lack of protection from maternal antibodies
- Stress from vaccination at a critical time

Prevention

Basic management

- Colostrum for everybody
- Clean, dry, warm surroundings
- Easy access to high quality feed and clean water
- Focus on internal biosecurity
- Prevention/handling of other diseases

Prevention

More profound actions

- Organic Vitamin E supply after weaning
- Desinfection of water (and milk) system
- Vaccines/autovaccines
- Wash sow
- Optimize floors, ventilation and other inventory

Handling

- Antibiotics (High dose, twice daily)
- Painkiller
- Water (Use bottle in beginning)
- Sick box (Heat and soft bedding)

How can we improve survival rate?

- The first 2 days are crucial since nerval damage and profound joint damage can not be fixed
- Start treatment immediately – not after coffee break
- Dehydration: deadly but often ignored
- Remember: 20 min is a long time for an individual with bacterias in the blood stream!

Important:
This pig will never find the water nipple.
I you don't want to help it, kill it now!!



Thank you for your attention

