A practical guide to differential diagnosis in swine

4 – Rectal prolapse

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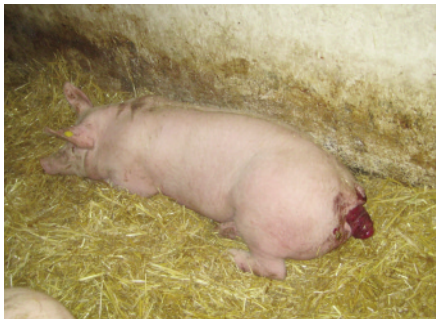
Rectal prolapse can look quite ordinary but can have a serious impact on animal health. It can prevent removal of metabolites produced during the digestive process, cause pain, encourage biting by pen-mates – thus leading to infection and even bacteraemia – and, if left alone, can cause necrosis.

The last part of the gut, the rectum, has a huge unselective absorbtion capacity, meaning that if elimination does not happen regularly, together with water, a number of toxins can enter the bloodstream causing intoxication, liver burden and discomfort.

Rectal prolapse can have many causes, the most common is constipation with hard to release stools that adhere to the gut walls, such that pushing to get rid of them culminates in projection of the last segment of the rectum outside the anus.



Similarly it can happen when swine are coughing as the sudden rise in inner pressure is able to bring protrusion. It can also happen in overcrowding situations when pen-mates step on one another's bellies.

Generic diarrhoea such as enterocolitis and some gut worms can also result in prolapse. A more specific cause can be stricture of the anal sphincter, called tenesmus. Less well known is salmonella two months after diarrhoea and local inflammations affecting the last part of the urogenital tract (vaginitis, urethritis, etc).

Then come the factors which are able to cause relaxation of keeping the rectal structure in situ, the most classic being ageing. In young animals it may be caused by mycotoxins such as zearalenone that also have swelling effects similar to those of phytoestrogens.

The most common treatment is to isolate the animal to avoid pen mates biting and then waiting until the protruded segment necrotises and falls. However, in the process lower feed intake, constipation and bacteraemia often occur, and this is quite commonly associated with high weight loss.

Surgical treatment, cutting and sewing with the tobacco bag technique, requires expert skill, is considered expensive and does not always allow for a complete recovery.

It is therefore better to focus on prevention, through providing adequate water, providing fibre in the correct amount and quality according to the production phase, and ready treatment for fever.

Prevention and treatment of gut and urogenital tract diseases, along with toxic agents, are reported in the table. ■

Check list	Corrective action
Potential cause: MYCOTOXINS	
• Vulvovaginitis, vaginal and/or rectal prolapse, • Reproductive issues; stillbirth, splay leg, low litter size, • Carry-over in sow milk	• Prevent mould growth • Purchase clean raw materials • Use Mycofix
Potential cause: MANAGEMENT	
• Water intake/constipation • Overcrowding • Cough • Transport • Seasonality • Tail docking, tail biting • Sudden diet changes, soft faeces, ingestion of wood shavings	• Control water flow per minute and pressure as well as drinker efficiency • Increasing space • Control fibre content of feed, avoid sudden diet changes
Potential cause: PATHOGENS	
• ELISA • PCR • Flotation procedure of faeces samples	• According to etiology
Potential cause: AGE	
• Average sow population • Number of farrowings	• Replacement rate
Potential cause: GENETICS	
• Control of heterosis effect • Avoid overconsumption/overfeeding/ excess of feed.	• Discuss with genetic company
Potential cause: NUTRITION	
• Check fibre content and fibre sources • Too high levels of barley (β-glucanase) • Grinding fineness • Control feed intake • High sodium or potassium levels	• Check feed formulation and grinding fineness

References are available from the author on request