



Virtual Sheep Conference 2021

Laryngeal Chondritis of Texel and Beltex sheep: Incidence, pathogenesis and suggestions for further work - Q&A's

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1. Is it similar to sudden death syndrome?

I suppose there may be many causes of 'sudden death syndrome'. Haven't come across that particular term but I do know that laryngeal chondritis is a major differential diagnosis for sudden death in a Texel sheep. Sudden death is a very common history when the diagnosis is LC.

2. With LG in texels is there any way of treating it? Is there any age that death is more prevalent?

In tups it seems to be commonest in tup lambs and shearlings. Older tups seem less prone. Some say there is a hormonal influence around puberty/ tupping time but I am not aware of any hard evidence for this. I am not the right man to ask about treatment, but would guess that high a long course of high dose penicillin might be effective.

3. Was there any evidence of pulmonary changes associated with the pressure changes, or anything which would be associated with a connective tissue disorder?

No evidence of pulmonary changes in LC. The diaphragmatic ruptures are probably most likely to be the result of mechanical pressure. There is no histological evidence of disordered collagen formation, using special stains, either in the aneurysms, diaphragm or larynges. This makes it less likely but probably does not rule it out. There are some parallels with Brachycephalic dogs (pugs/ bulldogs) and connective tissue disorders have been suggested as contributing to their problems.

4. Is there any work done in the UK to find a gene that carries Laryngeal Chondritis?

Not yet - that is our next plan! Working with Maresa Sheehan (DAFM) and her team in Dublin, and probably with colleagues looking into Brachycephalic dogs.

5. Could there also be environmental factors contributing to diaphragm ruptures such as feeding/diet?

I suspect that anything which increases abdominal pressure might finally make the diaphragm rupture (e.g. ruminal bloat or late pregnancy). But I think there must be a weakness there to start with.

6. Why the incidence of Texel throat is more frequent in the summer months, is there an allergic predisposing factor?

I don't think it's allergic, I think it is more likely that sheep breathe in and out more often in summer, increasing trauma to the lining of the larynx.

7. We have started a study using ultrasound to assess the larynx, have you had any experience of using ultrasound yourself?

No, none. I have no personal interest in it but I do know that the group in Dublin are getting pretty good at it.

8. What signs of asphyxia in throat ewes? When buying rams what characteristics or types should be avoided to reduce our chance of getting a ram with texel throat?

That is a very good question. At present we just do not have enough evidence to answer it.

9. Does Texel throat affect hilltex or other cross bred Texels? /Is there any evidence that the condition follows crossbreeds?

I have seen it in crossbred ewes and tups but the incidence is lower, probably because of hybrid vigour.

10. Is early slaughter the best advice if one encounters this issue and should one also cull offspring of diagnosed cases?

Yes and yes

11. Is it any way caused with intensive feed supplement? i.e too high in protein etc or trying to push feeding too much?

Not directly, I suspect, but indirectly in the following ways:

- High levels of starch may lead to ruminal bloat and abdominal distention, putting pressure on the diaphragm.
- High levels of cake feeding may lead to a muscular carcass and a high oxygen demand, leading to breathing in and out fast and a higher risk of airway trauma.

12. LC is a common Respiratory disease seen in Texels and Beltex at post-mortem. Were other Respiratory illnesses ie. Pneumonia/ pleurisy etc more common in other breeds and less common in the Texel?

My impression is that Texels suffer from the other respiratory diseases at the same rate of other breeds but also suffer from LC additionally.