



ON THE HOOF

Veterinary Services - Bitesize local updates

Could 2021 be another Schmallenberg year?

In Scotland we have seen cases of congenital deformity in lambs and calves due to in utero Schmallenberg virus (SBV) infection in 2013 and 2017.

There is a theory with other Orthobunyaviruses such as Akabane that they cycle within the population approximately every four years, potentially as a result of variations in herd or flock immunity and also depending on local midge activity. With that in mind, could 2021 be another year where we see cases?

So far looking at blood samples received through the autumn of 2020 we have no conclusive serological evidence to suggest that SBV has been circulating. However we cannot rule this out with confidence.

The early lambing sheep flocks lambing from now on provide the first opportunity to consider the potential impact of in utero SBV infection this season.

As the congenital deformities frequently lead to dystocia practitioners are very likely to see suspect cases, especially in high value pedigree sheep flocks.

Foetal deformities we have seen have included:

- Arthrogryposis of varying severities
- Scoliosis/kyphosis
- Torticollis
- Small brains
- Cerebellar hypoplasia
- Hydranencephaly
- Narrowing of the spinal cord

Some photographs of ovine cases received at the Dumfries DSC from 2017 are shown below:



SRUC Veterinary Services reviewed 31 cases of congenital deformity in calves and lambs received in 2017 as suspect SBV cases. The findings were really interesting:

- 8 cases were confirmed as being caused by in utero SBV infection
- 15 cases showed arthrogryposis or CNS pathology like SBV cases but the cause was consistent with either a genetic defect or exposure to a teratogen in utero and not SBV.
- 8 cases showed pathology that was not consistent with SBV exposure

The full article is at the link below:

<https://veterinaryrecord.bmj.com/content/181/13/341.2>

The main take home message here is that in many deformed calves and lambs that may look like suspect SBV cases, the deformity is actually as a result of something else and not SBV.

Obtaining an accurate diagnosis is therefore very important, particularly this year as an indicator of what might lie ahead for the main lambing period and spring calving. If you are seeing suspect cases please get in touch with us to determine the best approach for diagnostic testing.

For suspect lambs and calves the most useful samples to collect are umbilical cord, amniotic fluid (as below), brain and spinal cord. Testing foetal fluid/blood for SBV antibodies is also useful particularly as some calves are virus negative at birth.

Given that the seroprevalence of SBV is thought to be relatively low in our area, maternal serology is also a useful, indicative diagnostic test.

Collecting amniotic fluid from a foetus



We hope for the sake of your clients and their sheep you do not see cases and if you do want to discuss cases further with us, please get in touch OnTheHoof@sac.co.uk