

RICHARD KNIGHT

Cattle vet Richard Knight, from the Cumbria-based XL Vets Westmorland Veterinary Group, takes a closer look at a common cause of difficult calving on units throughout the UK. Here he tells us how to recognise a twisted uterus and explains how it can happen and why it's vital to treat the condition quickly and correctly.

## Recognise the signs and act promptly

# A twist of fate

Uterine torsion (twisted uterus) is a cause of dystocia – or difficult calvings – and it's certainly the most common calving problem that we get called out to. In the 18 years that I've been at this dairy-based practice, every other assisted calving that I'm called out to will be the result of uterine torsion.

If a producer has had one or two cases before, they'll often recognise what it is before I arrive. A twisted uterus is relatively easy to diagnose, once you know what to look for.

A cow will walk around with her tail head up in the air, looking like she's going to calve. The 'Ferguson reflex', which prompts the cow to start pushing, won't be triggered until the calf is in her pelvis. And it can't move up into the pelvis if the uterus is twisted.

If the uterus has been twisted for several hours, the cow may also look unwell. The 'torsion' occurs at the neck of the uterus – between the vulva and the cervix. So the vagina is constricted. A typical 180° torsion will result in the calf being upside down or, if the twist is through 360°, the calf will be the right way up. Either way, it can't make an appearance without intervention.

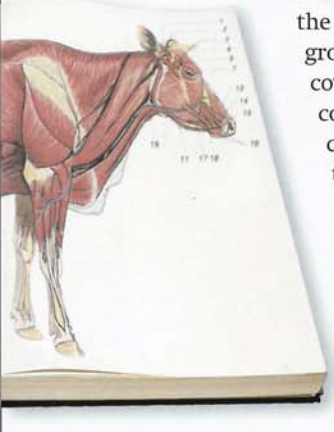
Correcting a twist or torsion can be quite straightforward, if you know what you're doing. It's certainly something that a producer can learn to do, with hands-on training from a vet. I prefer to be called out because, although it's relatively simple, if it's not done correctly then it can cause a lot of damage.

Producers can check for a uterine torsion if they clean the vulva and use a clean and gloved hand, and use a lubricant. They won't hurt the cow or introduce infection. But they could, if they detect a problem early on and call the vet, save her life and the life of the calf. In a 360° torsion the blood supply to the calf can be compromised, with fatal consequences. We regularly get calves out alive but time is crucial, so keep an eye on any dry cows that are due to calve and look out for those raised tails.

## The encyclopaedia **Uterine torsion**

### Cause

The uterus – including the calf and all the contents – twists at or just before calving. This can be the result of moving cows to a new group. Bullying from a dominant cow can do it. Poor rumen fill and compromised dry-cow management can also increase the likelihood of the condition.



### Symptoms

A cow that's close to calving and has a twisted uterus will be off her feed, restless and will hold her tail head up. She looks like she's going to calve, but doesn't. If she's been like that for several hours, she may also look unwell.

### Diagnosis

An internal examination will reveal a 'closed' vagina, caused by the torsion at the neck of the uterus.

### Treatment

Manual manipulation by the vet can be used to twist the uterus and calf back to their 'normal' position.

### Prevention

Good dry cow management is vital. It's essential to minimise stress and sudden movements that may cause the unborn calf to twist the uterus. Good rumen fill can help here too, acting as a support and keeping the uterus in place.

Milk test offers management benefits

# PD test in a bottle saves time

Pregnancy testing using milk samples is very accurate. It helps identify cows for veterinary attention and it is saving one young dairy farming family time as they strive to manage more cows and get the best from their herd.

text **Karen Wright**

*Caroline and Mark Davies and Mari: need to streamline operations*

The past two years have been a whirlwind for Mark and Caroline Davies whose feet have scarcely touched the ground since they were married in June 2013. Both fortunate to have taken over the running of their families' milking herds, their first job just a month

after the wedding was to bring the cattle together.

"We started moving my family's cattle to Mark's 73-hectare unit while the cows were at grass in July 2013," says Caroline. "By October my 110 cows had been merged into Mark's 150 head. He downsized a little to accommodate my cows, as we didn't have the facilities to take them all."

Today, the couple are milking 240 Holsteins and a few Ayrshires at Cilau Fawr, near Llandissilio in Pembrokeshire, and the cows are showing no ill effects from the disruption.

Average production for 2014 was 9,207kg at 4.18% fat and 3.38% protein on twice-a-day milking and a summer grazing winter-housed system. With somatic cell counts averaging between 150,000 and 180,000 cells/ml, and Bactoscans at around 30, the couple are pleased with progress so far.

With silage and whole crop still made on both family farms and the youngstock looked after by Caroline's parents on a unit 12 miles away, the couple admit that moving between the two farms on a regular basis adds to the pressures on their time.

Baby Mari was also on the way last winter and was clearly going to add further to their workload, so the need to streamline procedures became even more pressing and the couple cast around for solutions.

It was at around this time that they received a leaflet explaining how pregnancy diagnosis could now be undertaken using the routine milk sample. The idea appealed to them.

"We spoke to our milk recorder and she explained that we could send the samples every month as part of the routine recording and that we could choose at what stage after service to do this," says Mark. This meant that they could PD the cows with no extra input from them and it would leave the vet's time free to investigate any problems.

*Milk PD test reduces stress on cows*

## Immediate benefits

Opting for a milk PD test to be carried out automatically on any sample from a cow 42 days after insemination, they started using the service in November 2013 and decided they would 'give it a go for a few months'.

"We could immediately see the benefits," says Caroline. "We didn't have to separate cows and keep them back to PD. This puts less stress on the cow as she doesn't need to be handled; she doesn't need an internal examination; and, in fact, she is 'scanned' in-calf without even knowing.

"And the results are here soon after testing. This month we milk recorded on a Thursday and the PD test results were back on Monday," she continues. "It's like waiting to get your exam results – quite an exciting day and we've so far been very pleased with the outcome.

"In our latest test, for example, we tested 31 cows and 24 came back as confirmed in-calf. Six were not in-calf and one was a recheck, which is done at no cost at the next recording."

With the herd calving all year, the testing is carried out with every milk recording and those animals found not to be in-calf are separated out.

"The vet will then double check that the negative animals are actually not in-calf, and this has so far always confirmed the milk test result," says Mark.

"If they are cystic he'll use a PRID or CIDR or they may get Estrumate if they appear to be cycling," he says.

They'll then be marked up with tail paint and closely watched for signs of bulling and hopefully soon be back in the system.

And although the vet doesn't do as much routine PD work now, his time can be used to address the real health and fertility issues and discuss areas for improvement with the couple.

"We're also aware there's a chance that the cow could lose her calf after PD when the test is done as early as 42 days, so we have to bear this in mind," adds Caroline. "But to be honest, there's also that worry when the internal examination is done as there's a risk of infection and it's definitely more stressful for the cow."

## Highly accurate

"Our experience so far is that foetal losses after 42 days are minimal – and they are definitely fewer than before. They say that the test is 98% accurate and I would completely agree with that. We definitely wouldn't switch back now," she says.

Furthermore, they believe the test has the scope to improve the herd's fertility. "It's early days with our combined herds and we haven't really got comparable figures, but our current calving interval is 406 days with 2.21 services per conception and 40% conception to first service.

"We'd like to get our calving interval below 400 days and I'm sure the milk PD test will help us achieve this, as well as bring us great advantages when it comes to day-to-day herd management." |

## Testing pregnancy from milk samples

- The test measures Pregnancy Associated Glycoproteins (PAGs), which are produced in the placenta of pregnant cows
- PAGs are highly specific to pregnancy and start increasing from conception
- The PAG test determines pregnancy with an accuracy of 98%
- The test can be used as early as 35 days after service although there can be foetal losses after this date
- Results are either positive, negative or inconclusive, and any inconclusives are re-tested free of charge
- An auto-selection procedure identifies the cows for testing every month, on the chosen day after service
- Results are reported through NMR's Herd Companion or can be emailed to the producer
- Producers who do not routinely milk record can also use the service on an ad-hoc basis using purpose-designed sampling kits