# Learning how to use laparoscopy in cattle

**I CHOOSE my CPD away from the practice on the basis that I hope to learn something new that will directly change my practice for the better.**

**MARK CRAWSHAW** describes a practical course on bovine endoscopy he went on recently at the Shepton Veterinary Centre in Somerset – and then putting it into practice back home

I was aware of reports from Europe on bovine laparoscopy and that several practices in the UK that had started using the technique reported excellent results. So this course, run by one of the UK pioneers of bovine laparoscopy, looked promising.

In hindsight, I can see that Sotirios Karvountzis, the excellent course tutor, had carefully thought through and successfully executed an effective learning process for this relatively complex new (for bovines) field.

This was achieved through a combination of thorough familiarisation with the equipment, emphasis on the pitfalls and how to avoid them and hands-on use of the equipment in live animals requiring displaced abomasum (DA) correction or exploratory laparoscopy.

Pre-course preparation consisted of memorising the names of the nine different items of equipment and which ones were needed for the three different methods of left DA correction using e-mailed photographs and lists. I also read a review paper on the subject.

This was time well spent since laparoscopy is radically different to conventional bovine surgery and more complex, requiring significant new skills.

Day one started with the theory, majoring on experiences of using the technique at Shepton Veterinary Group, benefits of laparoscopy over conventional treatments, familiarity with the equipment and its care, the steps involved for each procedure and practising abomasal trocharisation using a cardboard box containing balloons!

This was of considerable help in developing co-ordination of left (instrument) and right (laparoscope) hand since all manoeuvres inside the animal need to be visualised and this is not as easy to achieve as one might think.

In the afternoon we visited farms and after first practising on a suspended dead cow we moved on to live animals, performing exploratory laparoscopy and left DA correction (Christiansen method) with ample opportunity for the two delegates to carry out the procedures under supervision.

Day two started with a quick recap on equipment, procedures, pitfalls and the balloons again after which we visited several farms for exploratory laparoscopy and a right DA correction; again we were able to carry out procedures ourselves.

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One case illustrated the potential for exploratory laparoscopy. An under-sized first lactation dairy cow had been diagnosed with a left DA the day before the course but when visited on both course days this was absent. However, the cow was still unwell so an exploratory laparoscopy using the ventral approach was performed.

A purulent tract from the umbilicus to the liver with associated peritonitis was found (liver abscesses may also have been present but these could not be visualised), the legacy of a previous navel infection. This allowed a specific diagnosis and prognosis which would have been difficult to achieve in any other way.

Discussion with the dairyman revealed that since a change of calf rearing staff, navel disinfection had been discontinued several years previously but this case would strongly influence a change of policy!

So how did my first case go once I got home? There were a couple of beginner blunders that did not prove serious and ultimately a successful and rewarding Christiansen method of LDA correction was completed.

One slip-up was using the wrong item of equipment initially to trocharise the abomasum, despite all

that familiarisation! This underlined that Sotirios had been right to keep repeating the equipment and procedure steps since in the heat of your first solo performance it is all too easy to get confused with the complexity of the equipment and procedure.

As to be expected with the first run of a training course there are a few areas for improvement. More assistance for the live cow procedures involving having the cow on her back would have been helpful and safer. The course notes could be made more useful by including an *aide-mémoire* for equipment care and a summary of the laparoscopic procedures, since the details can be quickly forgotten.

The course proved a success for me as I am sure laparoscopy will be a big step forward in our practice not only for less invasive correction of DAs but also to improve diagnosis of abdominal and even thoracic disorders.

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