



What is the Canine Cruciate Registry? Podcast transcript

Pam Mosedale BVetMed MRCVS

Mark Morton BVSc DSAS(Orth) MRCVS

RCVS Knowledge:

Welcome to the quality improvement box set by RCVS Knowledge. A series of webinars, podcasts, and video interviews for practices and practitioners.

Pam:

Hi everyone. Today, I'm going to talk to Mark Morton. Mark is an orthopaedic surgeon at Chester Gates. He is the clinical lead there as well, and he's QI Lead, Quality Improvement Lead at CVS referrals. And we're going to talk to Mark about a very exciting project we've got happening at RCVS Knowledge, which is the Canine Cruciate Registry. Hi Mark.

Mark:

Hi Pam. Thanks for the introduction and yeah, welcoming me to the QI podcast. I'm excited to be here.

Pam:

Good. Thank you. So what is this Canine Cruciate Registry then?

Mark:

So the Canine Cruciate Registry is something we've been working on for the last few years. Really grateful to have RCVS Knowledge's backing. It sort of fits in with the role of trying to improve the quality of care we give to our patients. The cruciate registry aims to sort of collect data around cruciate surgery in dogs, across the whole of the UK. We want to know about outcomes. We want to know about complications. We want to know about all different techniques and see how dogs do, really.

Pam:

Yeah. And having been qualified quite a long time now, I realize that, over the 40 years plus I've been qualified, there've been so many different techniques for cruciate repair during that time. So is that one of the reasons that you think we need a cruciate registry to compare some of those?

Mark:

Yeah, absolutely. I mean, cruciate ruptures are the most, or one of the most common causes of lameness in dogs. And cruciate surgery, I would guess, is the most commonly performed orthopaedic

procedure. And that's whether you're a vet in general practice or you're an orthopaedic specialist seeing referrals, it's quite commonplace. And as you say, there's lots of different techniques. As vets, it's our job to advise owners on treatments options, as well as what can go wrong with those treatment options and how often complications may occur. And yes, there's lots of studies out there about all these different techniques, but they're often based on a really small number of patients. Often surgeries performed by one surgeon or in one particular hospital. We don't have any really good studies that compare techniques. We don't have that many studies that look at how these dogs do over the long-term. So follow-up in some of the published papers about techniques might be a year or a couple of years, but we're sort of interested in how these dogs really do long-term following cruciate problems.

Pam:

Yeah. I think that's a really good point because particularly in referral practice, I guess you don't really get the longer term follow-up that you might get in general practice.

Mark:

Absolutely. And one of the criticisms of lots of studies when they're performed in universities or referral clinics, is that you sort of may miss out on complications further down the line. You see the patient for a short period of time around the time of surgery. You probably see most of them back for a check at six or eight weeks, but then it's quite easy to lose touch with how those dogs do because they go back to their own vets for long-term care. And you can not only miss a short-term complication, like a wound infection, if the general practitioner deals with it, but you also miss out on, do all these dogs get arthritis long-term? Do they struggle after two or three years?

Mark:

And the cruciate registry is a really good way that we can keep track of these patients long-term. Registries are sort of commonplace in human medicine and surgery. If you had a hip replacement or a knee replacement, it's now mandatory for those to be put on the national joint registry. They have a similar thing, the national ligament registry for cruciate surgery in people. So we're a little bit behind the curve there, but we hope we can catch up.

Pam:

Yeah. So I mean, luckily I'm still in possession of all my own joints, but I've seen that, that you can look at surgeon's performance and you can look at, and there are things like the registries that collect all this information. You were talking about papers from referral practice and from specialists. Is this just for referral surgeons?

Mark:

No, the cruciate registry will be open to all vets performing cruciate surgery across the UK. We recognize that cruciate surgery is performed across the board from general practice, to orthopaedic specialists. Any technique that's being performed can be included, so you can log details of any surgical procedure that you're doing. Our aim is to get as much data as possible from as many dogs in the country, as we can. We want to know how outcomes differ between techniques. We want to know if one technique is better than the other, if one technique has fewer complications than another. So yeah, open to all.

Pam:

That's really interesting. So how does it actually work then?

Mark:

So as a vet, when you'd seen a dog with a cruciate rupture, talked to the owner about the options for treatment and between you, decided on surgery, you would register the owner on the online portal. All you need to do is add the owner's email address in, and you just need sort of verbal consent for that. The owner would then be sent an email link where they would register with the portal. They'd get a sort of information sheet sent to them, and there's a consent procedure that's electronic, as part of that. And then the owner answers some questions about the dog's lameness. So there's a few sort of standard questions about how long the dog's been lame for et cetera. Has it been on any medication? Has it got any other problems and things? But then they would complete some validated outcome measures that are then repeated intervals going forward.

Mark:

So outcome measures are quite commonly reported in people, or quite commonly used in people. I think they call it patient reported outcome measures or PROMs. So obviously we can't get our patients to fill them out themselves, so we refer to them as client reported outcome measures. We're using two with the registry. So we're using the Liverpool osteoarthritis in dogs questionnaire, as well as the canine orthopaedic index. And they're both validated questionnaires against force plate data, so we know they correspond to lameness. So the owners complete those questionnaires, and each questionnaire has a score. At the time of surgery, the vet then completes a surgical report, so details the procedure that they performed and there's various options for every procedure that we've developed with a group of orthopaedic surgeons. And then that triggers further questions to the owner. So the owner will then be sent the same questions that they answered before surgery, at six weeks, at 12 weeks, at six months, at a year. And then every year following that.

Pam:

No, that's great that you're having such a long-term followup with them. That should give you some really interesting information, shouldn't it? Do you think it's going to be easy to get owners to do this? To get owners involved?

Mark:

I think that's the biggest challenge we face, is engagement of vets and the owners as well. I think when we explain to owners about the registry and about the benefits, so far, when we've been testing it, everybody's been very keen to be involved. One of the things that that seems to help is owners knowing that you will be looking at their results and things, and that you will be following their case. And if you don't think a dog is doing quite as well as it should be, it's a way to track that progress and get in touch with the owners and advise them that they might need a checkup as required.

Pam:

Yeah. I think as you say, it'd be a challenge. But from the vet's point of view, from the referring vets maybe or the vet's point of view, would they be able to use any of this data for their own clinical audits, own outcome audits?

Mark:

Absolutely. So a big part of the registry is the individual audit. So it's important to say that all data is anonymous. I don't think we're quite ready in the vet profession yet to have our outcomes and complication rates posted on the internet, but you're able to see your own results. When they go into

the registry as a whole, they're all anonymised. But you'll be able to compare yourself to other surgeons, to compare your complication rates to the average complication rate for a procedure across the whole of the registry.

Mark:

So yeah, clinical audit will be a big part of it really. Vets can also use it as part of credentials, whether that's for advanced practitioner status or specialist status, or membership of colleges and things. You can document how many procedures you're doing on an annual basis and you can report that really easily. So I think one of the reasons why we're maybe not as good as we could be with regard to clinical audit is that lots of our practice management systems are difficult to use and it's difficult to pull the data out, so this gives an easy way. You can see what your complication rate is, you can see how many problems you've had and you can see how well your patients do.

Pam:

Yeah. I mean, tell me about it. With practice management systems and data mining for clinical audit, it's a nightmare, isn't it? And there's so many systems and none of them are easy to use, from that point of view. So I think that'd be really useful, and really useful not just to the specialists and getting the revalidation or whatever, but also to vets in practice who are doing this because it's great to have the clinical audit information anyway. And also useful for practice standards and all sorts of other things.

Mark:

Absolutely. And there's no reason why you can't use the data you get from this for promotion as well. From saying, "Look, we're involved with the Canine Cruciate Registry. We're very pleased to be involved. We're looking at what we do. We take our outcomes seriously." And I think the more we can encourage people to be involved, the more mainstream clinical audit will become.

Pam:

Yeah, that'll be great. And it's benchmarking too, isn't it really? Having the data to benchmark your own results against... So yeah, that's really useful. Is there anything that you can do to encourage owners to do this?

Mark:

One thing we've tried to do is to make the registry website a really useful source of information and sort of unbiased information. So there's details on the website that vets can direct owners towards, that has information about all the commonly performed surgical techniques for cruciate ruptures. So we've got members of our steering group and advisory group to write those. They're all sort of evidence-based. There's some information about cruciate ruptures in general, and about meniscal tears. Also, some information on there about outcome measures and how we monitor how these dogs are doing. So the website's a good resource, as well as the portal, for people to add information.

Pam:

If I was still in practice as a referring vet, I would find it really, really useful. It sounds great. Yes. And my dog had a cruciate rupture too, a couple of years ago.

Mark:

Yeah, so I remember you telling me about that. And it's interesting, isn't it? Because you've probably experienced this on both sides. As a vet performing, I don't know if you did cruciate surgery in your practice, but you'll have certainly seen dogs with cruciate ruptures. Guiding owners to what technique, and then also being on the other side of the fence as an owner, how do you decide what to do for your own dog?

Pam:

Exactly. No. I mean, in practice, I obviously never really did any orthopaedics. We had the great Chris May in my practice, so he did the orthopaedics and yeah. But yeah, absolutely. I mean, when it happened to my dog, he's a Labrador and he was... It's a couple of years ago. He's 10 now. I have to tell you Mark, that my very first thought was, oh God, I hope his insurance covers it.

Mark:

Absolutely.

Pam:

But my second thought was, oh, what's the best technique? What should he have? So I really went on the advice of colleagues and I was very pleased that the orthopaedic surgeon I went to was able to tell me about how many procedures they'd done for the technique they decided for him. But yes, I think it's a minefield for owners and pretty tricky for referring vets, quite honestly.

Mark:

Yeah, absolutely. I'd agree with that. And the more information we have to base the guidance we give to owners and in my case, guidance to vets who might be referring cases as well, the better really. We certainly audit our outcomes and complication rates here. We do TPLO and we usually look at how many infections we've had, how many late meniscal tears we've had, for example. But it's hard work. It takes somebody the best part of a day to go through all the records and manually pull it all out, so this will make a big difference to us, from that point of view.

Pam:

Yeah. I think that's a really good selling point, that it be very easy for people to see their own information and compare it. Because as you say, trying to retrieve that information yourself, is really difficult, isn't it? Do you think it might be quite difficult to keep owners engaged longer term, even if they join and do everything straight postoperatively? What about a couple of years down the line, that might be more difficult, do you think?

Mark:

Yeah, absolutely. I mean, I think like all these things, we all sort of flick past emails and don't reply even if we intended to, let alone, we decide we don't want to. But I think that the selling point to owners of, look, we will be keeping an eye on these results. We won't be phoning you every week for the next five years to ask how your dog's doing, but when a survey comes in, we'll see the results. I think that's an important factor. And again, talking to owners about, yes, there's some benefit to their own dog because we will be tracking how they're doing after surgery, but also the information we gather in the short and long-term will help every other dog that has a cruciate rupture in the future.

Mark:

So I think from that side of things as well, we'd hope to keep owners engaged. They are free to withdraw at any point. They can withdraw their consent just via the website. So if they don't want to continue participating, we won't continue to hound them. And of course, sadly, there'll be some dogs that pass away for whatever reason. And again, the owners and vets can let us know and we'll obviously stop contacting the owners for further updates.

Pam:

Yeah. So I was just going to ask you that. Would you hope that the referring vet would let you know, or the vets who've done surgery, would let you know if they do know if dogs are no longer with us? Because owners can get quite annoyed about being sent things after their dog's died, I think.

Mark:

Yeah. We sort of recognize that might be a problem quite early on, and both the sort of operating vet and the owner can turn off the questions at any point. And every email that an owner receives to ask them for further follow up, has a link on the bottom that they can click on that allows them to say, no, thanks. I don't want anymore, for whatever reason.

Pam:

I mean, it sounds great. Sounds really exciting. And I think it's something that we've needed for a long, long time in the veterinary world. Do you think there'll be other registries as a result of this?

Mark:

Well, I certainly hope so. The Cruciata Registry follows on the back of the Total Hip [Replacement] Registry that was formed at Liverpool University sort of 10 or so years ago now, by Professor John Innes. And Eithne Comerford now runs that. And they sort of pushed the boundaries with that, when it first came out. One of the problems with the total hip registry is, simply case numbers. In that, it's not a procedure that everybody does or everybody can do, so your numbers are relatively small to start with. We'd hope to have lots of engagement with the Cruciata Registry, because literally any vet who's doing cruciata surgery can be involved. And we know there's lots of those about. But hopefully now we've sort of done the ground work with a registry for large numbers of cases, it'll be very easy for other things to follow on.

Mark:

The only tricky thing with some of them might be how we assess outcomes. orthopaedics sorts of really lends itself to outcome measures, and there is validated outcome measures for orthopaedics. Some other types of surgical procedure or medical procedure, how well things do afterwards is more tricky to determine. But you might look at things like quality of life scores, or some of the things like the canine brief pain index maybe more appropriate for other conditions. So I think I might say that I've had enough of developing the Cruciata Registry, but I'd certainly encourage somebody else to develop a registry for other procedures.

Pam:

Yeah. Well interestingly, another area that Knowledge are involved in, we have the National Audit of Small Animal Neutering complications. But that's going to be developed into a National Audit of Post-operative Outcomes for all sorts of different surgical procedures and not just in cats and dogs, in

different species and different procedures. So I think there's a big future there for benchmarking exercises.

Mark:

Yeah, absolutely. Jenny is doing some great work on that project and that's certainly a big project to get your teeth in for multiple procedures across multiple species. But yeah, it's exactly the same idea that the more data you can get for all of these things, the better placed we will all be as vets to advise owners on what they should do when their pet or their animal has a problem.

Pam:

And that's important, isn't it? Having the results from audits or from registries, to actually have these discussions with owners where we actually have some figures around what we can do and what the results are likely to be and what the risks are. It's a really important part of informed consent, isn't it?

Mark:

Absolutely. I think every vet, I'm sure, has an open and honest conversation about, "Yes, we hope this goes well, but occasionally it doesn't. These are the problems that may occur, and this is how likely they are to occur." But a lot of that is based on somebody else doing the surgery in a far-flung university in 10 cases or whatever. It's so much more relevant if you can use real world data and say, "Look, we've done 50 of these procedures here. 49 of them did great. One sadly had a problem, but actually it was minor and it resolved very quickly." So being able to tell them your... Use evidence that you've developed yourself, as well as sort of evidence from the literature. Don't get me wrong, there's a place for both. But I think real world data has real benefits.

Pam:

Oh, that really... That definitely reassured me when I was an owner taking my dog for that procedure. No, I think it's amazing. Very exciting. And it will be great, Mark, if you don't mind if I talk to you again, once you've got going and a few months into it, to see how it's all going.

Mark:

Yeah, absolutely. I'd love to chat to you about where we're up to with it and things. We hope to go live at the end of July. We're currently testing it with a small number of vets at the moment, but with real owners. There'll be a launch event on the 28th of July, which will be open to all, where we'll share a bit more about how the cruciate registry works and demonstrate the portal and things, as well as combining that with a bit of a CPD from some speakers from around the world about cruciate surgery in general. So everybody's sort of welcome to join that, and watch this space for more information. A final plug, you can go to www.caninecruciateregistry.org, and find out more information about it. And you can also access it through the RCVS Knowledge website in the vet audit section.

Pam:

Fantastic. I presume that's a virtual event on July the 28th?

Mark:

Unfortunately so.

Pam:

With the current circumstances!

Mark:

Grand plans of a big champagne launch, but unfortunately we're restricted to Zoom. But you can bring your own champagne.

Pam:

Yeah, bring your own champagne launch. Put in your diaries, everybody, because that sounds really exciting. And thank you so much for your time, Mark. And we'll speak again about this in a few months time when it's all got going.

Mark:

Yeah. Thanks for the opportunity to chat about it, Pam. And yeah, I look forward to coming back and telling you where we're up to.

RCVS Knowledge:

For further courses, examples and templates for quality improvement, please visit our quality improvement pages on our website at rcvsknowledge.org.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/). Feel free to adapt and share this document with acknowledgment to RCVS Knowledge. This information is provided for use for educational purposes. We do not warrant that information we provide will meet animal health or medical requirements.