



International Colic Surgery Audit

Pam Mosedale, QI Clinical Lead, BVetMed MRCVS, Chair of QIAB

Professor Debra Archer, DVMS PhD CertES (soft tissue) Dip.ECVS FHEA

RCVS Knowledge:

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Pam Mosedale:

Hi everyone. Today, I'm really lucky to be talking to Professor Debra Archer, who is Professor of Equine Surgery at Liverpool University and Deputy Head of the Department of Equine Clinical Studies. Hi Debra.

Debra Archer:

Hello Pam.

Pam Mosedale:

Well, I wanted to talk to you about your Colic Surgery Audit that you're carrying out there. Sounds really interesting. How did you get involved in that?

Debra Archer:

This is a project that actually, Dr. Tim Mair and Dr. Nat White first thought up many years ago. And it was something that I was interested in right from the start. I thought, you know, that was a great idea and I think the equine colic community, we have an international research meeting every four years, and they're a very kind, open, forward thinking community of clinicians who've got an interest in not just research, but they want to get the best outcomes for our colic patients. So, it's always a lovely meeting to attend and a really nice group of international clinicians who have a passion for all things related to, not just colic, but equine gastrointestinal disease. So, obviously Nat and Tim, were the initial sort of drivers for this, and they did a lot of the sort of the groundwork for this, and it quite quickly became clear that there was a real sort of need to do this for equine colic and sort of benchmarking of outcomes. But there were a number of challenges and the work that Tim and Nat did initially was to seek the views of a variety of people about contributing to an international colic audit and that, you know, again, generated my interest and sort of showed me that actually, this wasn't something that was going to be easy to do. And that's probably why it sort of didn't get off the ground at that stage because there were a lot of barriers and that's where I think qualitative research, which I think has sometimes been sort of dismissed as sort of soft research, but in these COVID times, understanding people's

thoughts, what motivates people, but importantly, what stops people from undertaking research and audit would come into that as well, so yeah, it sort of occurred to me that actually this was a project that we needed to get going with. I spoke to Nat and I spoke to Tim. Tim has come on board, Nat is now retired, but with their blessing we launched INCISE, which is the International Colic Surgery Audit, with the aim of really trying to get this up and running and get some benchmarking data.

Pam Mosedale:

I love the name INCISE. Great.

Debra Archer:

Oh that was an afternoon, one Saturday afternoon on call, fiddling around acronym.com is a great thing, but I think in all seriousness acronyms do help something stick. And it needed to be sort of relatable to colic surgery as well. And the logo, if people look at the logo, that was derived from me taking a photo of pedunculated lipoma to a group of graphic designers. I had a rough idea, but it's got a pedunculated lipoma. The green partially came in because the guys, when I showed this to them did go slightly green.

Pam Mosedale:

I was going to say, I bet that was not something they look at on a daily basis. And you mentioned barriers and I know from, you know, small scale clinical audits in veterinary practices, there's always barriers. And what were the sort of barriers to getting this started?

Debra Archer:

I think, one of the big things was confidentiality and obviously as you'll know, for the veterinary profession, it's very, it's different, isn't it, you know, audit performed in the NHS, there isn't that sort of commercial competition and those sensitivities around it. So, in the vet profession, I guess in private healthcare as well, that audit, obviously isn't something that is mandatory necessarily for them, but there are commercial sensitivities. And obviously, I think that was probably one of the biggest barriers, was what was going to be done with that data. How would it be handled, together with things like time commitments of actually contributing data, as you know, it does take time to sit down and get that data entered. So I think those were the key barriers and they were ones that I pondered over quite a lot, just trying to work out how we were going to get around those. So from the confidentiality side, we felt it was really important that there was absolute trust in the process that we were undertaking. So, the clinics are never in, the whole sort of process, they get a random five digit number, that is in a password protected database that only myself and one of the nominated persons at the University actually have access to. So even people who are helping with data entry on our side, they have absolutely no idea who these clinics are, which is something that I think is really, really important. Also when we set this up, we made it such that when the clinics come to generate their own reports, it's the right people within the clinic who are generating those reports because obviously people sometimes don't realize the significance of that data and how important it is.

Debra Archer:

So we've got a login, we have a dedicated website. Practices get sent, and again, we are quite careful about how we send out these passwords. It's only to sort of the more senior people in the practice who it's then up to them how they use those usernames and passwords. But there's a user and then there's a super-user. So the user can enter data and you can only enter data for your clinic and you can only

access the data that you've entered as a user. The super-user has slightly more rights. They've got editing rights, they can delete cases if somebody's incorrectly entered them, but they more importantly can download the data for their clinic. They can't access any of the other clinic's data. They can only access their own, but they can generate their audit reports. And again, this was something that we thought there had to be a carrot for that time, that clinics would take to enter that data. So the carrot is that you can get your own data, if you know, somebody in the practice wants to go through and look at a series of colic cases, it's a really easy way to facilitate that. From a commercial point of view, you know, they can look at numbers and then from the audit point of view, instead of them having to sit down and do their own calculations, literally at the press of a button. You put in your month range, we do it by month. So you can look at one month, you can look at three months, you can look at a year. You put in your date ranges and you literally press the button and you get an automatic report of your key sort of benchmarking and sort of key outcome data. And that includes, you know, whether the horse survives, but also looks at complications and, looks at sort of other things that I thought were quite important. Where horses were euthanized, was it an economic decision on the owner's part? Was it economic and welfare, or was it because there was no treatment option? Because I think that's something that's really important in audits, obviously in human healthcare, people you know, they die. Whereas our animals, generally, we make that decision and that might include euthanizing animals that could have lived with treatment, and where economic decisions were at the forefront. And I think it's really important that we take those into account when we're doing our audits.

Pam Mosedale:

Absolutely. And that's a very interesting point you said about the advantage to the practices about having their own audit report. Sounds amazing, just being able to press a button, but that'd be great in the UK for Practice Standard Scheme, because general practices now in the UK have to do some clinical audit in their Practice Standard Scheme. So for those equine practices in the scheme, that could be really, really useful, but I guess that when practices get their data back, do they get sort of benchmarks of the average data from everybody?

Debra Archer:

So that's what we are doing at the moment. So we already started analyzing the data for 2019 and 2020. The grand scheme that was that we were going to do this all prospectively. So the websites and we've got an app that hopefully is going to be released fairly soon, and I have an appreciation of just how difficult the technology behind this and the design and even simple things like making a change, appreciating just how difficult it is from a website designer point of view. But the pandemic then hit just as we were ready to launch. And obviously our own clinic included, you know, we had limited teams and I thought, oh gosh, I can't launch that all on people, but we also had to generate some data for people. So, we ended up asking practices to retrospectively enter data for 2019, enter data for 2020 and we've just put out a call now actually for practices, if they can enter their 2021 data. And it's a sort of a little bit of a reminder of, you know, why not do your colic audit for last year? And, you know, hopefully the numbers of surgical colic cases that practices see, it's not such a massive amount of work to get the data. The data that we collect is fairly simple. It's a balance, isn't it, because if you collect too little data, you know, people go well, so what, we knew that already, but if you make it too complex and you try to collect too many things, people just lose interest and they just think, oh, I can't be bothered. It's too much hard work.

Debra Archer:

So, what we will be doing, in 2022 is presenting the results at international conferences. So we get those out as quickly as we can. And so that we get some papers out as well, to get those benchmarks, so that people can compare themselves. I suppose the overarching aim is something, again, I thought about quite a lot, you know, what do you do with this? And it's making sure that as a veterinary profession, we treat audit data with respect that it should have. So, you know, the aim is I don't want to hear of practices sort of criticizing other practices because their audit results are better than, you know, another practices. That's not the aim of the game. The aim of the game is that practices can look at their own results and think actually, you know, we are kind of similar to others, we're obviously doing things right. You know, there might be a practice that looks at some of their data, and thinks, oh gosh, you know, we've got a really high rate of surgical site infection, maybe we ought to look into this. Or actually, a practice that has really good outcomes for things like large colon volvulus or small intestinal resections think, gosh, you know, our rates are really good. What are we doing right? And maybe share evidence, some best practice so that it helps as a community us to ultimately get the best outcomes for our patients.

Pam Mosedale:

Yeah. So they can celebrate doing well, as well as look at areas where they might feel that there is some room maybe for improvement. But it's great, isn't it because if people don't measure things, how do they know whether they're doing well or not? So how many clinics have you got participating in this?

Debra Archer:

So as of, currently I did put out another call yesterday, just an update to clinic. So as of yesterday we had 59 clinics all over the world signed up, which is about 24% of all the clinics that were invited. Because obviously colic surgery is something that is a bit of a niche surgical procedure, so you know, having a quarter of all the clinics that we invited signed up is fantastic. And we've got over three and a half thousand colic surgery cases entered on the database. We've actually got more than that, but I haven't looked at all the data that was entered after, when we did the download in the sort of end part of the summer. But yeah, there's a lot of colic data there and I think it's the researcher in me, I never thought I would ever get excited by data, but I think you can have something staring at you in the face and not realize it until you actually sit down and look at your data. And I think it can be really satisfying. It can be really surprising in a good and bad way, but you know, ultimately, I think you get a bit of personal satisfaction out of knowing you're doing really well, if you're not doing well, that you're actually doing something about it. And certainly for our pets and horse owners, I think they would derive some satisfaction knowing that we actually care about what happens.

Pam Mosedale:

And I think it's part of informed consent too, don't you? That when you're talking to owners of horses with colic that you're going to potentially operate on, you can give them a little bit better information than just so that, well, this might go fine or it might not.

Debra Archer:

Yeah. And it's something that at the university of Liverpool, I was really lucky Barry Edwards was my mentor through my training. And then Chris Proudman was involved as well, you know, and both of them right from the start, Barry was publishing his outcomes. He was very open about his mistakes and I think he had the ethos, which is something I always try to emanate as best as possible, but he was always very open about his mistakes. When we were training as surgery residents, he told us all the time

of things that he'd done wrong. And I always really appreciated it because I think most people don't like learning from their mistakes, and at the same time he was very open about publishing the results, you know, whether they were good or bad. So he started all that benchmarking data. And as you know, at the University of Liverpool, we've published lots of papers over the years, which is essentially benchmarking for us. And when we speak to owners, we are very open about the likely chances of survival, right from the minute they walk in and we do that initial clinical examination. Again, when we're in surgery, we give owners sort of percentage chances of survival, which I think the owners really appreciate. It's all about keeping them updated so that they don't get any surprises. But actually when you look at the benchmarking data that's out there, it's from a very limited number of clinics all over the world. So that's why this project's really important. The other challenge is going to be in presenting that data. Obviously this has all gone through ethics and there's very detailed description of how we're going to handle this key data, which is really valuable, it's really important. It's got to be handled absolutely rigorously. I think speaking to some of the private clinics, the fact that a university is involved in holding that data, obviously, the commercial sensitivities around the big corporate practices, it's lovely to know that they trust us with that precious data. What we will be focusing on in presenting the data is that we absolutely maintain that confidentiality yet get that benchmarking data out.

Pam Mosedale:

That's amazing to know that the great Barry Edwards, who's my veterinary hero too, from when I was at RVC, that he was part of the inspiration behind this. That's amazing. So any clinic that wants to can contribute, any clinic that's doing surgical treatment of colic's, isn't it not, not medical treatment.

Debra Archer:

So we have, in the website, you can enter all your medical cases, which is actually what we do so we can, can get an idea of what proportion of our colic's are medical or surgical. And we actually look at outcomes for our medical cases. Again, we just needed to get people using the site. We didn't want to frighten them off by having to enter all the medical colic cases as well, but yeah, people can enter that because actually in the data that they get from their audit reports, it will show you what number and proportion of colic cases go to surgery, what proportion and number are treated medically and those that are euthanized on initial assessments and during hospitalization.

Pam Mosedale:

That's really interesting. I wonder if there's going to be any geographic variation in some of these things, with you having clinics all over the world.

Debra Archer:

Yeah. And we'll be looking at that. So it's fantastic. We've got clinics in South America, Africa, North America, Europe, Asia. So a really diverse group of clinics from big university clinics, right through to big private clinics, down to the smaller ones who might only do a few colic cases per year. And it doesn't really matter how many colic cases you do, but it's all about looking at those outcomes and just seeing how you're doing really

Pam Mosedale:

So the longer term follow up, presumably they're followed up until they're discharged from hospital and sutures removed, et cetera. But is there any longer term follow up with the owners?

Debra Archer:

Yeah, we've built that into the portal, so we suggest a three, six and 12 month follow up, but the practicalities of doing it are hard because it does take somebody time to do all of that. I think it's something that's really important. It's been a passion of mine and again, something that Barry and Chris Proudman, when they publish their data, there's actually very little in terms of long-term outcomes. And it is important because it's not just all about, you know, packaging that animal out of the clinic and thinking, oh, well, we've done that, absolutely fine. But appreciating that actually for that owner, they've got that animal to deal with 24/7 and worry about. And it's no good us doing something if all of our patients are suddenly dead or have had complications within three or six or 12 months following surgery,

Pam Mosedale:

That's going to be really useful. I think isn't it having some idea of that, but I suppose again, you've got the problem of GDPR and all these kind of things.

Debra Archer:

Yeah. And that's where I think technology comes in for us. We've got a fantastic web designer, who's a pet owner himself. He's absolutely passionate about helping us. And he's been very kind to us, but we are doing this all self-funded through the University of Liverpool it's where my CPD sort of money that goes into to support this. So I suppose longer term, we'll have to think about how we fund this. It's, again, that challenge in that we feel very responsible for that data that we hold from those clinics and that's where we haven't gone looking for commercial funding because that puts everything in a slightly precarious position. It would be lovely, and it's fantastic that the Royal College of Veterinary Surgeons are so proactive about clinical audit, and I know Pam that's been largely driven by you and it's lovely to see a team of people really driving that. But I would hope to see other big veterinary organizations, European and American Colleges, Australian ones really trying to take this on board. And I think there is a real need for an international sort of community that manages all the issues around audit and veterinary research, because if you look at why it's not done, there's so many barriers in place and we really need to overcome those because otherwise we are going to be stuck with this dearth of data. You know with COVID in this COVID era, when you just see how quickly medical researchers are able to generate outcome data it's so easy that the wheels very slick, but for us in veterinary terms, I think there's quite rightly barriers around ethics, et cetera, and owner consents. But I think actually owners, if they understood what was going on, actually the owners would actually be very happy for some of the data to be used without having multiple hoops to jump through. I think sometimes we make a rod for our own backs and I think that's something that I'm really working on over the next few years. The difficulty is it's all well and good doing it for the UK, but that doesn't then help the international community. So I'm hoping, it would be nice to bring some of the big guns, RCVS included on board to really get some consensus around how we do this. Because otherwise, as I said, we're all going to be reinventing the wheel in our own countries for many years to come and not really getting the data we need and what I think animal owners all over the world would actually like to see us do.

Pam Mosedale:

Wow, that's a big ambition, Debra. I really agree with you entirely. It's bad enough, even within the UK, if we're not careful, even within small animal practice, results of audits can be very siloed between different practices. And that's what we are trying to do at RCVS Knowledge is have this, that everybody's data can contribute and everybody can benefit. So to even do that internationally is even more of a big

ambition, but that would be wonderful, wouldn't it? Well, it just sounds amazing. It sounds like you've really got the technology cracked there as well with your app, et cetera. I think, well, it's got to be something that's easy, hasn't it? Because if it's not easy, people won't bother.

Debra Archer:

That's why people haven't. And I think, as we've discussed, for practice management software companies, you know, audit and sort of outcome data and complications seems to be something that is seen as a real hassle, and why would you do that? And lots of computer says no. And that surely has to change because if you can get that data entered automatically, or it's a compulsory part of your entering of your clinical data, then it would just make it so much easier.

Pam Mosedale:

It would, wouldn't it, but with so many different practice management systems, but yeah, I agree that that is the aspiration that you could so easily, much more easily access the data. But it sounds like you've got it really sussed there, that sounds amazing. And I'd really encourage any equine practices that do any kind of colic surgery to join in.

Debra Archer:

Yeah. And I said, you know, hopefully once we've got this sort of a blueprint, you know obviously RCVS I know are looking at developing the technology to get surgical outcomes measured, hopefully. I've made many mistakes with it along the way, and I hadn't realized just how complex and time consuming it is, but hopefully this will just get the ball rolling, really.

Pam Mosedale:

Absolutely. So do you have any plans to actually extend to other surgical procedures in equines?

Debra Archer:

Well, I guess that's where it ties in, you know, with the Royal College again, I think it's, it's really important to try and develop a system that's really good, not that it would matter, I guess, having lots of mini audit sort of processes going on, but I think if you did have something, you know, I think when you are having to log in and enter data, just having something that you're not having to switch around and look at different websites would be good. So I'm really excited to be involved with the Royal College project. I think that will be a great help. And there's lots of challenges in there, but if you don't try, you never know.

Pam Mosedale:

No. So, and for those of you who don't know it, at RCVS Knowledge, we're trying to be involved in a National Postoperative Outcome Audit, which would include all kinds of surgical procedures in small animals, equines, farm animals, exotics, and to cover the whole spectrum. It'll take a while, but I think that's the aspiration for the future, isn't it? Lovely to speak to you, Debra. Thank you so much for your time.

Debra Archer:

No problem, Pam. Thank you

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