

Introduction to Animal Physio

Welcome to the first of our regular columns on animal physiotherapy. Whilst I plan to teach you about different aspects of animal physiotherapy over the coming months, and to answer readers' questions, I thought it best to start by giving you a proper introduction to the field.

Animal physiotherapy is said to have begun in the UK in the 1980s, rapidly spreading to other countries such as the USA, Canada and South Africa. Australia was a comparative latecomer, with our association starting in 1999, however we made up for the delay by being only the second country in the world to introduce a Masters degree in Animal Physiotherapy in 2003, through the University of Queensland. The two-year program graduates about 16 students per class, most of whom come from overseas or work on horses – there are very few dedicated dog physios in Australia and, so far, I am the only one to embark on a PhD in canine physiotherapy.

So, what do these precious few canine physios do?

Everything starts with a veterinarian's referral. Animal physios are just that – physiotherapists, not vets, and just as we work with human doctors to ensure the best, safest treatment for our human patients, we rely on vets to rule out serious illness that will not respond to physiotherapy. One classic example is osteosarcoma, which can initially look like a harmless enough limp, but can kill very quickly if not diagnosed promptly. I would feel dreadful if I wasted precious time treating your dog for a limp, only to have the vet find an osteosarcoma when I asked him or her to investigate why the limp wasn't responding to physio – much better to be safe than sorry!

Once we have the referral and any x-rays that may have been taken, we perform a “subjective examination”, also known as “taking a history”. This means we ask the owner lots of questions about how long the problem has been there, how it is affecting the dog's daily activities, what seemed to be the cause and so on – we are trying to recognise patterns to give us clues about what sorts of treatment the dog may respond to, and give ourselves markers to evaluate how treatment is progressing. For example, if we know a dog's regular agility time and it improves by 8 seconds after starting physio, we know we're on the right track with our treatment.

We then perform an “objective examination”, also known as a “physical”. A physiotherapy physical is similar but at the same time different to a vet's physical. While we both investigate the integrity of the muscles, nerves, tendons, ligaments and bones, physios spend a lot of time looking at how the dog moves and how those movements and functional skills need to improve.

Once we have developed a list of movements and skills that need to improve, we can begin treating. There is a variety of treatment techniques we can choose from, including: machines to help control pain or improve muscle function; special bandaging or strapping techniques for swelling or joint support; the careful application of warmth or ice for pain, swelling or spasm control; or hands-on physiotherapy techniques such as massage or joint mobilisations. I also use a variety of food-rewarded exercises to help the dogs learn to switch on the right muscles the right amount at the right time so that their joints are better protected and their movements improve.

Once I have checked that the dog is responding to the exercises properly, I teach the owners a “homework” program of exercises to practise at home between appointments. I need to rely on the owner's help, as I can't tell the dog to go home and do 10 of this exercise and 5 of that!

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We then make a plan based on the owner's report of how things are progressing and keep the vet updated to ensure that everyone in the team is working on the same page.

So, what sort of conditions respond to this type of physiotherapy? My motto is "don't MOAN – see the physio" where MOAN stands for Muscular, Orthopaedic, Airways and Neurological problems. Most conditions that respond well to human physio also respond well to canine physiotherapy, provided we have: the correct diagnosis; a dog who is keen to co-operate (some dogs can't be bribed with food, after all); and an owner who has time to do the exercises – typically 10 to 20 minutes most days of the week, although more serious conditions require more intensive physiotherapy programs.

Can I give you some examples of conditions that respond to physiotherapy? Of course!

Well, I'm sure we all know of an overweight dog or two! And it's all very well to set goals of decreasing food and increasing exercise in order to lose weight, but this is much easier said than done! The reality is that many obese dogs are too stiff and sore to exercise comfortably – not to mention too unfit! Would you want to go on a fitness campaign when it hurts to move? Physios can help by designing exercise programs that prevent that "muscles you never knew you had" feeling that we humans often get after a bit too much exercise, and can perform techniques and teach homework exercises that help to make the joints and muscles more willing to cope with increased exercise. We are also taught about animal nutrition as part of our Masters degree, so can help the vet monitor the results of diets.

Of course, prevention is always better than cure, and as such physios can apply the same strategies we use on elite human athletes to help keep our canine athletes in tip-top condition. If we can fine-tune a dog's body position sense and teach them to predict when to brace their joints, as well as make them optimally flexible and strong for their specific sport, we can help minimise the risk of injury and maximise their performance in much the same way we do with elite human athletes. It's just that we're not allowed to bribe our human athlete patients to do their exercises like we can with the dogs!

One of my areas of particular interest at the moment is physiotherapy for airways conditions. For example, we see a lot of dogs with ticks in summer and these poor puppies can end up with breathing difficulties. As part of my PhD research, I discovered that a number of techniques used on humans with breathing difficulties were originally trialled on experimental dogs, however I was stunned to learn that these techniques have never been used therapeutically on critically ill dogs! I am therefore researching how these techniques can help dogs in intensive care wards and I am excited to report that the early results look promising!

I will give you lots more examples in upcoming columns, where I plan to address a specific condition, such as luxating patellae or canine obesity, in much more detail than I've been able to in this overview of the field. By all means, if you have a question about how physiotherapy may be able to help your dog, or would like to suggest a topic for an upcoming column, please feel welcome to contact me on (02) 4739 4557 or info@k9physio.com.

Wishing your dogs the best of health, Helen Nicholson BPhy, MAnimSt(Animal Physiotherapy).