



**holistic animal
PHYSIOTHERAPY**

PHYSIOTHERAPY MANAGEMENT OF OSTEOARTHRITIS/THE GERIATRIC DOG

Many of our canine companions survive well into old age, and the geriatric dog is becoming more common. Many physical and physiological changes occur in elderly dogs including reduced metabolic rate, reduced ability to fight infection, increase in percentage of body fat, loss of muscle, bone and cartilage (and subsequent development of degenerative joint disease).

Degenerative joint disease – a progressive degenerative condition of the joints, is common in elderly canines. Cartilage destruction, subchondral bone sclerosis, synovial membrane inflammation and the development of osteophytes can reduce quality of life, limit activity, reduce performance, produce pain and discomfort, and be associated with muscle atrophy and joint stiffness. A vicious cycle of pain, discomfort, reduced activity and muscle/strength loss occurs. Veterinary and pharmacological management of symptoms is often the backbone of management of degenerative joint disease in the dog. Additionally, weight management is crucial. Calorie restricted canines have been demonstrated to have longer life spans as well as delayed the onset and reduced severity of degenerative joint disease. However, adequate protein is required to ensure that muscle mass is maintained, and dietary advice should be sought from veterinarians and canine nutritionists.

Physiotherapy treatment is directed at the symptoms of age related degenerative joint disease such as pain, reduced joint range of motion, and weakness. Massage, joint mobilisations, acupuncture and heat may be used to reduce pain, muscle spasm and address joint stiffness/improve segmental motion.

Frailty in humans has been described in 5 components:

- Chronic undernutrition/unintended weight loss
- Exhaustion
- Low physical activity levels
- Poor mobility
- Weakness

These components of human frailty have been approximated and applied to the canine population and studied. In a population of 116 dogs studied, it was found that of the 5 components of frailty, poor mobility and low physical activity levels were individually and significantly associated with a reduced time to death. Although there are limitations to this study, and this oversimplifies the complexities of ageing, it does highlight an important message. Exercise is important in elderly canines and physiotherapy can assist in improving exercise tolerance. Addressing some of the causes of reduced exercise tolerance such as pain and joint stiffness is an important part of physiotherapy. Underwater treadmill is a very useful tool that we utilise at Holistic Animal Physiotherapy. By altering the water height in the treadmill, buoyancy can be utilised to reduce the ground reaction forces through the joints, to allow freer motion. Water at coxo-femoral height has been shown to reduce ground reaction forces by 62%. Gait analysis in the underwater treadmill can also reveal any subtle asymmetries in gait, and assistance can be provided to the animal to facilitate normal gait patterns. Developing an exercise and strengthening/stability program is also an important part of improving the health and well-being of our geriatric dogs, and this can be done during a consultation with us at Holistic Animal Physiotherapy.

Finally, education on managing risk factors in the home environment is another valuable key in improving the comfort of elderly dogs. Providing a warm supportive bed can improve the comfort of arthritic dogs. Slippery surfaces become very difficult for elderly dogs to manage and may be causing more pain and muscle fatigue, and even avoidance behaviours. Non-slip matting or carpets can be extremely useful for elderly dogs. The use of toe grips or non-slip boots may also be appropriate. Stairs may be difficult or dangerous for elderly dogs and using baby gates to block them off or ramps (including for use in/out of vehicles) can provide peace of mind.

Physiotherapists can recommend the most suitable aides to assist the owner to helping their ageing pet. We are very passionate about helping the owner to help their pet, and many need advice and support throughout this process. Empowering them to help their pet each and every day is very rewarding and provides optimum management. Working very closely with the veterinary team and those specialised in palliative care is comforting to clients, and enables us to provide best possible care to the whole family. We all know how

difficult it is to come to the final decision and enable clients to let their beloved pet go with dignity. As a team, we can make this process as comfortable and least stressful for all involved. This we are passionate about.

Physiotherapy can be extremely beneficial in managing many of the physical problems associated with ageing. Please call us to discuss, or make an appointment. We look forward to assisting your dog to have a comfortable retirement!

PHYSIOTHERAPY BENEFITS:

- **Reduce pain/muscle spasm**
- **Facilitate healing**
- **Restore normal passive range of movement**
- **Muscle re-education – normalise muscle tone and balance**
- **Assist functional return to activities**
- **Prevent or minimise complications**
- **Improve proprioception (joint position sense)**
- **Improve core stability**
- **Increase strength in a controlled manner**
- **Gait re-education**
- **Improve your pet's overall condition**
- **Education to manage at home and maximise recovery**

WHEN?

Treatment should begin as soon as possible after an injury/surgery, and may be introduced as an inpatient whilst recovering as an inpatient. This will be provided to reduce pain, facilitate healing, reduce swelling and assist in transfers.

Physiotherapy is not just about exercise – we are experts at acute management of injuries also. Therefore, it is vital to maximise the speed of your dog's recovery to make sure he/she safely gets back to appropriate exercises and therefore limit any secondary complications.

An extensive home program will be given to help maximise your animal's recovery and this must be performed PAINFREE. Every animal is unique and should be treated as such when designing a program – **there is no formula!**

CONSULTATION

At Holistic Animal Physiotherapy we provide a thorough assessment (1-1.5 hr), including hands-on/manual assessment and treatment from nose to tail,

acupuncture, advice and provision of home program (including provision of appropriate stability exercises). We can also provide advice to help manage your animal at home with confinement, (as this can be stressful for the human and dog) and tailor your program to your needs. We are available for advice for ongoing management at any stage. Following consultations are 30 mins - 45 mins or packages of underwater treadmill and laser may be included.

LOOKING FOR FURTHER INFORMATION?

Please visit www.holisticanimalphysio.com.au / Facebook (holistic animal physiotherapy)/Instagram (brookeanimalphysio). Call Brooke (0408 022 660) to make an appointment or ask any questions you may have.

Kind regards,

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