



Home Exercise Advice for Neurological Patients

Sensory Integration

When there are neurological deficits the messages between the effected limb(s) and the brain are effectively not communicating properly. We want to increase proprioception by stimulating the sensory nerves within the skin. Using unusual sensations such as different brushes/materials or a vibrating toothbrush and regularly moving these over the affected areas will help to stimulate these nerves. A positive reaction is if the dog moves away from the touch as this means the message telling the brain of the unusual sensation has been received.



Tactile Stimulation

Alongside stimulating the nerves when the dog is stationary, incorporating strange sensations at the start of exercise can improve the dog's awareness of their limbs. Loosely tying something to the leg for a few minutes at the start of a walk can stimulate the nerves and we are looking for increased movement within the leg to show that the brain is registering the strange sensation. We do not want to nervous system to become desensitised to this sensation so make sure to only use this technique for a maximum of a few minutes.



Hot & Cold Therapy

Nerve endings beneath the skin report back to the brain regarding temperature. Therefore, alternating between hot and cold therapy using ice packs and heat/wheat bags or a shower, we can stimulate the nerve endings to report to the brain regarding temperature alterations.

Proprioceptive Tracks

Here we are effectively building a mini obstacle course for your dog to overload the sensory nerves. This can include:

- Different surfaces i.e. grass/carpet/mats
- Things to step over or onto i.e. poles/a step up onto a different surface
- Unstable surfaces i.e. cushions
- Obstacles to bend around i.e. cones



Weight Shifting

Neurological cases usually also present with atrophy (muscle wastage) and reduced weight bearing on the effected limb(s). By gently encouraging them to weight bear using a gentle rocking motion you are actively engaging the stabilising muscles and stimulating neuromuscular junctions. This will help to re-educate even weight bearing and correct posture. This can be done twice daily for around 10 repetitions.



Massage

As with sensory integration and tactile stimulation, massage will also stimulate sensory nerves. It can also be used to relieve compensatory muscular tension and promote correct weight bearing by massaging down the leg towards the paw when standing. Alternatively use a tapotement technique (ask your therapist to demo) as a stimulatory massage.