

# CUTTING EDGE

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The benefits of physical therapy and post-surgical rehabilitation have long been recognized in people and we are now seeing the benefits of rehabilitation in animals as well. Why would we perform rehab in animals? The goals remain the same, which include the following:

The following rehabilitation services are provided at the Dallas Veterinary Surgical Center (DVSC):

**Underwater treadmill** allows the patient to walk in a buoyant environment with less stress and strain being placed on the joints. The resistance of the



Strengthening the rear limbs on a therapy ball

## Diagnoses or conditions that may benefit from rehabilitation

### Orthopedic Indications

- Arthritis
- Hip dysplasia (conservative care)
- Degenerative joint disease
- Post-operative stifle surgery
- Hip surgery (TPO, THA, FHO)
- Fracture repair
- Amputation
- Trauma
- Arthrodesis
- Patellar luxation
- Ligament/tendon repair
- Tendonitis

### Neurological Indications

- Hemilaminectomy or laminectomy
- Fibrocartilagenous embolism (FCE)
- Degenerative myelopathy (DM)
- Balance disorders
- Peripheral nerve injuries
- Paralysis
- Loss of motor control

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## ANIMAL REHABILITATION

- Reduce pain and inflammation and speed the healing of injured tissue
- Improve/maintain joint range of motion
- Improve coordination or proprioception
- Improve ambulation status
- Strengthening, conditioning, or weight loss
- Optimal post-operative recovery
- Restore function and allow the patient to return to his/her previous activity level

There are wide ranges of diagnoses/conditions that may benefit from rehabilitation. The sidebar (right) lists several.

water also helps to increase the patient's strength while increasing circulation, range of motion and flexibility.

**Cold/heat therapy** can be used before/after exercise to decrease swelling and pain, to increase blood flow and to decrease tissue tightness.

**Therapeutic ultrasound** is the use of sound waves, which are passed through tissues causing certain physiological effects. Ultrasound can help to decrease pain and muscle spasms and it is beneficial in treating tendon and ligament injuries. It also increases the extensibility of collagenous tissues to increase range of motion.

**Electrical stimulation** can be used for muscle re-education, to

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Rehabilitation can play a vital role in reducing the recovery time of animal patients

# DVSC

*The highest quality surgical care for the well-being of your pet.*

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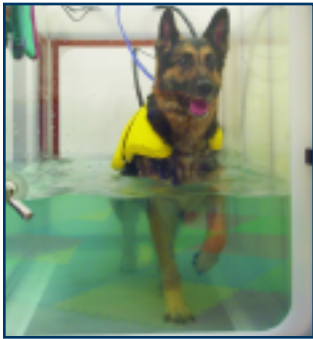
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### More conditions that may benefit

#### Other Indications

Splinting and bracing  
 Cart fittings  
 Obesity  
 Depression  
 Client education



German Shepherd walks happily on the underwater treadmill



Electrical stimulation on the quadriceps and hamstring muscles



Proprioceptive training on the trampoline

prevent muscle atrophy and to decrease pain/swelling.

**Gait training/therapeutic exercises** are used for strengthening, improving the use of an affected limb and improving overall performance.

**Massage** is used in conjunction with exercise/range of motion.

**Orthotics, splints and braces** can be used to aid/assist in the use of an injured limb.

**Cart fittings** are performed for patients that are unable to ambulate to allow them to maintain an active life.

A veterinarian or surgeon may refer any patient they feel is appropriate for rehabilitation to our rehab center. At the Dallas Veterinary Surgical Center (DVSC) our rehabilitation services are provided by a team of licensed physical therapists who have received additional training to work with

animals. After receiving a referral, our therapists meet with the owner and the patient and perform a thorough evaluation of the patient's neuro-musculoskeletal system. Measurements of joint range of motion, muscle mass, gait, pain, body composition, neurological status and functional status are taken and then a treatment plan is developed that is specifically tailored to the pet's needs.

The initial evaluation may last 30 minutes to one hour depending on the patient's needs. After the treatment plan is developed the frequency and duration of the visits are determined. The average length of a session is about 45 minutes. The patients are continually re-assessed during their sessions and modifications to their treatment plans are made accordingly. We encourage the owners to be present during the rehabili-

tation sessions but we also offer our clients the option to drop off their pet and in some cases the patient may board overnight to receive daily rehabilitation sessions. It is also very important that the owners play an active role in the rehabilitation of their pet and follow the instructions of the therapist. The owners are given exercises and activities to perform at home with their pet to ensure a successful recovery and to achieve the maximum benefits of physical therapy.

Rehabilitation can play a vital role in reducing the recovery time of our patients and we are seeing an increased demand for these services from our clients. Through collaborative teamwork our physical therapists along with the surgeon and primary care veterinarian can make sure our patients are receiving the appropriate treatment to return to optimal function.

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