Getting Started in Physical Rehabilitation

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Mary Ellen has written several books and contributed to numerous chapters regarding anesthesia, pain management, and rehabilitation. She has worked in various aspects of veterinary medicine ranging from small animal to zoo animal medicine.

OVERVIEW OF WORKING IN PHYSICAL REHABILITATION

The greatest asset for effective physical rehabilitation is an educated veterinary team. A rehabilitation veterinary technician should work under the direct supervision of a credentialed rehabilitation veterinarian who directs therapy. The larger team may be made up of a credentialed physical therapist, the referring veterinarian, a veterinary specialist (e.g., surgeon, neurologist), a veterinary chiropractor, an acupuncturist, hospital support staff, the owner, and other trained veterinary professionals.

The duties of a rehabilitation veterinary technician include assisting the supervising therapist in evaluating patients and performing prescribed therapies, keeping patient records up-to-date and accurate, and educating clients on how to perform home exercises. The American Association of Rehabilitation Veterinarians strongly discourages anyone working as a rehabilitation veterinary technician unless the...
Therapeutic Exercises

Therapeutic exercises are a daily part of the rehabilitation veterinary technician’s routine. The therapist chooses the exercises, and the technician carries them out. Exercises may focus on improving proprioception, balance, speed, endurance, focal strength, pelvic limb function, forelimb function, neurologic function, or land treadmill endurance training.4 Therapeutic exercise equipment includes physioballs, cavailed rails, balance blocks and discs, weights, tunnels, rocker boards, wobble boards, and treadmills (FIGURES 1 AND 2).5

FIGURE 1. Balance discs are used to help patients improve proprioception.

FIGURE 2. Wobble boards are another type of equipment that can be used for proprioception exercises.
Patient considerations such as motivation, footing, assistive devices, and leash/harness control must be assessed before beginning any exercise program, and therapist/handler body mechanics must be monitored to prevent injury. Exercises are designed to address specific impairments, and each is described with a goal, a technique, and a progression. Details of therapeutic exercises can be found in recent textbooks (BOX 1); however, to fully understand and perform these therapies, certification in rehabilitation is necessary.

**BOX 1 Recommended Reading**


**Manual Techniques**

Specialized manual techniques are used extensively in evaluating and treating rehabilitation patients. Credentialed technicians are trained in these techniques, which include massage, range of motion (ROM) exercises, and stretching. **Massage** may involve tapping, stroking, kneading, wringing, or skin rolling motions, either parallel to the muscle fibers or at an angle, and can be performed at a range of pressures (FIGURE 3). **ROM exercises** may be normal, in which a joint moves through its full ROM, or passive. Passive ROM exercises use an external force to move a joint without muscle contraction through its available ROM. **Stretching techniques** are often performed in conjunction with ROM exercises to improve flexibility of the joints and extensibility of periarticular tissues, muscles, and tendons.

**Physical Modalities**

Rehabilitation physical modalities are used as adjuncts to the patient’s treatment plan (FIGURE 4). Physical modalities are used as tools to alleviate pain; improve strength, flexibility, and joint ROM; and aid in tissue healing. A brief list of these modalities is presented in BOX 2.

**Recordkeeping**

Proper documentation of treatments should be completed each day. Any member of the rehabilitation team should be able to refer to the record and understand the needs and past treatments of each patient.

Because pain plays a role in any patient’s willingness and motivation, each patient’s pain score should be assessed and documented in the medical record during each visit.
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A detailed history should indicate the degree of pain, the disability, and how the patient copes with the disability. If changes in a patient’s pain level are noted, the supervising veterinarian should be notified. It is very important for the rehabilitation veterinary technician to remain in open communication with his or her supervisor about anything abnormal or any changes in a patient’s progress. (Pain scales from Colorado State University are reprinted on pages 44 and 45.)

Client Communication

Clear client communication and education are also essential to successful rehabilitation. The owner/handler must be well educated on the exercise program, especially the home exercise program. However, each client’s needs and expectations can vary depending on the time available for home exercises. The client needs guidance for home exercises, and the completion (or not) of home exercises should be documented in the record. Often, printed instructions, as well as verbal and physical directions, need to be provided for the client to completely understand what each exercise entails. This is also documented in the record.

**BOX 2 Selected Physical Modalities**

- **Superficial thermal agents**
  - **Heat (thermotherapy):** Stimulates vasodilation and causes increases in extensibility, thus reducing joint stiffness and leading to increased range of motion
  - **Cold (cryotherapy):** Typically indicated for management of acute injury or inflammation
  - **Neuromuscular electrical stimulation:** Usually used to address muscular weakness
  - **Transcutaneous electrical nerve stimulation:** Used for pain relief
  - **Therapeutic ultrasound:** Deep heating technique used for rehabilitating musculoskeletal conditions
  - **Low-level laser therapy:** Used for many applications, including acceleration of wound healing; promotion of muscle regeneration; treatment of acute and chronic pain, chronic and acute edema, and neurologic conditions; and postoperative care
  - **Extracorporeal shock wave therapy:** Used for increased bone, tendon, and ligament healing; accelerated wound healing; antibacterial therapy; and pain relief

Specialized Areas

Additional areas of education include topics such as aquatic therapy, canine orthotics and prosthetics, orthopedic and neurologic rehabilitation, canine sports medicine, pain management, nutrition, and working with geriatric patients.

**HOW TO BECOME A CERTIFIED REHABILITATION VETERINARY TECHNICIAN**

A certified rehabilitation veterinary technician is a certified, licensed, or registered veterinary technician who has completed a prescribed curriculum to receive the designation of CCRA (Certified Canine Rehabilitation Assistant), CCRP (Certified Canine Rehabilitation Practitioner), Certified Equine Rehabilitation Assistant (CERA), or CVMRT (Certified Veterinary Massage and Rehabilitation Therapist).

Currently, 4 certification programs in the United States offer these respective titles (BOX 3). Each program involves formal educational courses and wet labs, and each school has its own curriculum. The cost is relatively expensive for a veterinary technician, but certification allows veterinary technicians to command a higher salary.

Only certified, licensed, or registered veterinary technicians are accepted into the existing rehabilitation certification programs. In the approximately 40 states and provinces in which veterinary technicians are certified, registered, or licensed, candidates are tested for competency through an examination that may include oral, written, and practical portions. This process is regulated by a state board.
The Academy of Physical Rehabilitation Veterinary Technicians (APRVT; aprvt.com) is under way. APRVT (proposed) is a group of credentialed rehabilitation veterinary technicians working toward forming a veterinary technician specialty (VTS) recognized by the North American Veterinary Technician Association (NAVTA). APRVT is a nonprofit organization dedicated to supporting CCRAs/CCRPs in the field of veterinary sports medicine and rehabilitation. This board certification will allow veterinary technicians to possess the credential VTS (Physical Rehabilitation).

The academy’s mission statement is, “We are credentialed rehabilitation veterinary technicians providing assistance in physical rehabilitation, encouraging veterinary technicians to further education, while improving the quality of animals’ lives.”

For information about the Academy, please contact the following members of the Proposed Organizing Committee:

- **Kristen Hagler**, President | goldengaitk9@gmail.com
- **Wendy Davies**, Vice President | k9guru13@gmail.com
- **Deana Cappucci**, Secretary | dcapps13@yahoo.com
- **Lis Conarton**, Treasurer | lis@vmccny.com
- **Mary Ellen Goldberg**, Exam Committee Chair | mewhitester@gmail.com

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**What Next for Credentialed Rehabilitation Veterinary Technicians?**

For those who are already credentialed in physical rehabilitation, the formation of the Academy of Physical Rehabilitation Veterinary Technicians (APRVT; aprvt.com) is under way. APRVT (proposed) is a group of credentialed rehabilitation veterinary technicians working toward forming a veterinary technician specialty (VTS) recognized by the North American Veterinary Technician Association (NAVTA).

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**BOX 3 US Veterinary Rehabilitation Certification Programs**

- **The Animal Rehabilitation Institute** offers the Certified Equine Rehabilitation Assistant (CERA) program for veterinary technicians and physical therapist assistants. Classes are held in Florida.
  animalrehabinstitute.com

- **The Canine Rehabilitation Institute** offers the Certified Canine Rehabilitation Assistant (CCRA) program for veterinary technicians at training facilities in Florida and Colorado. A 40-day internship is required as part of the program.
  caninerehabinstitute.com/CCRA.html

- **Healing Oasis** offers the Certified Veterinary Massage and Rehabilitation Therapist (CVMRT) program for licensed or certified veterinary technicians, licensed veterinarians, licensed physical therapists, licensed nurses, and licensed or certified massage therapists at its facility in Wisconsin.
  healingoasis.edu/veterinary-massage-rehabilitation-therapy-program/

- **NorthEast Seminars** offers the Certified Canine Rehabilitation Practitioner (CCRP) and Certified Equine Rehabilitation Practitioner (CERP) programs for veterinary technicians, veterinarians, and physical therapists at The University of Tennessee.
  vet.utk.edu/clinical/rehab/programs.php
define the responsibilities of veterinary technicians. These responsibilities and duties depend in part on the type of employment the individual chooses. Standards for practice acts can be found on websites of the North American Veterinary Technician Association (navta.net) and the American Association of Veterinary State Boards (aavsb.org).

Veterinary assistants who are interested in becoming certified, licensed, or registered veterinary technicians should investigate the State Practice Act of their home state to see what practicing as a veterinary technician encompasses.

CONCLUSION

A rehabilitation veterinary technician’s job is complex and fulfilling. There are advancements in veterinary medicine daily, and animal physical rehabilitation is on the cutting edge. Many conferences offer specific tracks of learning in physical rehabilitation, such as the North American Veterinary Community Conference, WVC, and the American Animal Hospital Association Conference. If you enjoy exercise, training, massage, and recovery, then you may want to consider this field.

References