

Physical Therapy for Animals Selected Techniques

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The growing practice of physical therapy for animals receives thorough coverage in this introductory text. Veterinary personnel, animal trainers and interested physical therapists will discover a wealth of useful information on general aspects of physical therapy for animals and a detailed guide to the application of superficial and deep heating, cold, electricity, ultraviolet radiation, therapeutic exercise, massage, and other techniques.

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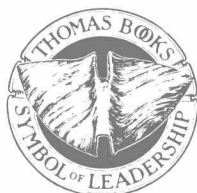
PHYSICAL THERAPY FOR ANIMALS

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PREFACE

THE concept of total physical therapy for animals is not new, but the practice of it by a qualified physical therapist under a veterinarian is new. Still to come are college programs designed especially for training students to become animal physical therapists.

Until that time, auxiliary personnel must be trained not only to use the equipment, but to use it exactly. The veterinarian who writes the prescription and supervises the therapy should have assurance that those doing the treatments are meticulous in order to prevent harm to the animal.

This book must not be construed as a text on physical therapy. Rather it is a "how to" book written for veterinarians, trainers, breeders, and veterinary students and veterinary assistants who have had little opportunity to obtain a detailed knowledge of the various techniques that can be used on animals. Every effort has been made to produce an easily readable manual so that all treatment procedures can be followed exactly.

This text contains all of the common modalities used on humans. Some such as whirlpool, packs, and tanks are easy to use and present little danger. Others such as ultrasound, microwave, and shortwave are extremely dangerous unless they are used with caution and exactness. Attention to detail in using any piece of equipment can never be overemphasized.

The order of presentation is simply a matter of convenience. The author does not wish to suggest that one technique is better than another or that a particular piece of equipment will give more beneficial results than another. Massage is just as important as a heat treatment, and the value of therapeutic exercise cannot be overstated.

I wish to express my sincere appreciation to Richard Rudy,

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A. H. D.

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**PHYSICAL THERAPY
FOR ANIMALS**

Part I
Introduction

Chapter 1

**GUIDELINES FOR THE
PHYSICAL THERAPY DEPARTMENT**

- I. General Considerations
 - A. Anticipated case load.
 - B. Personnel:
 - 1. Physical therapist.
 - 2. Veterinary assistants.
 - 3. Veterinary medical students.
 - 4. Physical therapy students.
 - 5. Secretary.
 - C. Location of department:
 - 1. Relation to outpatient entrance.
 - 2. Relation to inpatients.
 - 3. Floor level.
 - 4. Plumbing requirements.
 - 5. Electricity requirements.
 - 6. Floor support requirements.
 - 7. Fresh air availability.
 - 8. Ceiling support requirements for hoists.
- II. Specific Considerations
 - A. Size of department:
 - 1. Patient size.
 - 2. Number of patients.
 - 3. Number of therapists.
 - 4. Amount and size of equipment (tanks, pools).
 - B. Floor plan:
 - 1. Traffic pattern.
 - 2. Equipment.
 - 3. Plumbing.
 - 4. Electricity.
 - C. Electrical outlets:
 - 1. Separate circuits.

2. All outlets should be properly grounded.
3. Placed 3 feet from the floor.
4. Adequate voltage.
- D. Plumbing:
 1. Sinks — sliding cover, spray attachment.
 2. Hot water, 160 degrees F; cold water.
 3. Inlet and outlet pipes adequate size, accessible but out of sight, insulated.
- E. Lighting:
 1. Artificial.
 2. Natural.
- F. Floor surface:
 1. Nonskid tile.
 2. Tile surface that does not need waxing.
 3. Easy to clean.
 4. Colorful.
 5. Floor drain.
- G. Doors:
 1. Wide enough and high enough.
 2. Sliding versus usual.
 3. Solid versus see-in windows.
 4. Emergency exits.
- H. Communications:
 1. Phone.
 2. Intercom.
- I. Fire extinguishers:
 1. For electrical fires.
 2. For nonelectrical fires.
- J. Heating, air conditioning, ventilation.
- K. Office space.
- L. Storage space:
 1. Linen.
 2. Equipment.
 3. Medical supplies.
- III. Basic Equipment and Supplies:
 - A. Holding cages of various sizes.
 - B. Treatment table:
 1. *Must* be made entirely of wood. A metal treatment

- surface, padded or not, and/or a table with metal legs is *absolutely contraindicated* when using short-wave diathermy, microwave, and any electrical stimulation or diagnostic units.
2. A metal treatment surface without at least a 1-inch pad is *absolutely contraindicated* when using infrared or hot packs.
 3. Table measurements are arbitrary. Six feet long by 30 inches wide and at least 32 inches high are recommended measurements.
 4. A 1-inch-thick or more removable, nonskid pad with a washable surface will provide comfort for the patient.
 5. A shelf, half the table length, provides an ideal storage area. The lack of a shelf under the other end provides space for the therapist's lower extremities when sitting to treat an animal.
- C. Linen:
1. Large, thick turkish towels for drying and padding the animal and for wrapping hot packs.
 2. Cotton bath blankets for keeping animals warm, drying, and padding.
- D. Hot air dryers.
- E. An automatic lift for large animals.
- F. Rubber or nonskid mats of various sizes.
- G. Whirlpool with mixing valve assembly, turbine, and thermometer:
1. Stationary. Portable units should be avoided.
 2. A large unit versus standard height units.
 3. Low boys versus standard height units.
 4. Bases or stable, nonskid supports large enough to support an animal while in the whirlpool so it can see over the edge.
 5. Canvas slings of different widths and lengths to support the animal.
- H. Commercial hot pack unit and packs:
1. Units are available in different sizes.
 2. Packs come in different sizes. Avoid large packs,

- even for large animals, because large packs are heavy.
- 3. Tongs for removing packs from hot water.
- 4. Candy/dairy thermometer for checking water temperature.
- I. Ultrasound unit:
 - 1. Transducer should be adjustable and waterproof.
 - 2. Coupling medium gel.
- J. Shortwave diathermy unit:
 - 1. The drum and cable electrodes provide deeper heating than do the spaced plates or condenser pads and cuffs.
- K. Infrared lamp:
 - 1. Luminous generators are recommended. The radiation penetrates deeper than that from a nonluminous lamp.
- L. Ultraviolet lamp:
 - 1. A large general lamp is recommended.
- M. Commercial cold pack unit and packs.
 - 1. Avoid large packs.
- N. DC/AC generator:
 - 1. Electrodes.
 - 2. Wires.
 - 3. Unit stand.
- O. Various medical supplies.
- P. Chairs and stools tall enough to sit on.
- IV. Ideal equipment:
 - A. A large exercise tank or pool:
 - 1. If a commercial tank is not feasible, a large farm watering tank is recommended.
 - B. Microwave unit.

Chapter 2

GENERAL CONSIDERATIONS FOR ALL TREATMENTS

I. Preparations

A. The therapist/veterinary assistant/trainer:

1. Your clothing should be neat and clean and should allow freedom of movement. Appearance is important to associates and pet owners.
2. Sleeves should be loose and no longer than three-quarter length. They stay cleaner longer.
3. Shoes should be clean or polished, comfortable, and have skid-resistant soles.
4. A name tag will assist the animal's owner and staff personnel in remembering your name.
5. Hair should be short or tied back so it will not interfere with the treatment, touch the animals or the unit.
6. Use a deodorant, and guard against bad breath.
7. Do not use strongly scented perfumes, powders, aftershave lotions, etc. These may affect the animal's disposition.
8. Your hands should be clean, nails short and clean.
9. Do not wear jewelry other than a watch and wedding ring.
10. A nonmagnetic watch and one with a sweep second hand or one on which the seconds can be read easily is recommended. A stretch wrist band is preferable.

B. The animal and you:

1. Most animals will be scared to death and many will also be in pain.
2. Each animal is an individual, and no two cases are the same.
3. Kindness and a great deal of patience are absolute