NOTES ON PHYSICAL THERAPY

by

MARYLAND STATE BOARD OF PHYSICAL THERAPY EXAMINERS

The use of Physical Therapy will be a valuable aid to the physicians of Maryland.

This is a brief review of Physical Therapy and a short bibliography. The reference material will be available at the Library of the Medical and Chirurgical Faculty of Maryland, 1211 Cathedral Street, Baltimore, Maryland. A list of Physical Therapists licensed to practice in the State of Maryland may be obtained without charge from Mr. C. W. Gaines, 2411 North Charles Street, Baltimore 18, Maryland.

It is hoped that this article will be a step toward the development of intelligent teamwork between the Physical Therapist and the Physician.

Definition

Physical Therapy is defined in the Law of Maryland as the treatment of human injuries, diseases or disabilities by means of the healing properties of exercise, massage, ultraviolet rays, mechanical devices, heat, cold, air, light, water, and electricity; but not by means of Roentgen rays, radium, surgery or drugs; and a Physical Therapist is defined as one who treats only patients diagnosed and referred by licensed medical doctors. In a broader sense, physical therapy includes "therapeutic teaching" as well as the administration of physical treatment procedures, since patients and relatives may need to be instructed in muscle re-education techniques, the use of prosthetic devices and other treatment procedures.

Practical Use of Physical Therapy

Ideally the doctor and physical therapist function as a team. If the doctor feels that physical therapy is indicated, he may send the patient to the physical

1 Editor's Note: The State Board of Physical Therapy Examiners wishes to acquaint doctors with some of the basic features of Physical Therapy. It is hoped to stimulate interest toward a better understanding and use of Physical Therapy.

2 Excerpts from "The Job of the Physical Therapist," published by the American Physical Therapy Association, are included in this material.
therapist with the diagnosis, including any additional information needed to understand the patient's condition, and a statement of the results he wishes to obtain. The doctor may specify what treatment is to be given or he may discuss the treatment plan with the physical therapist. The physician and the physical therapist should be free to discuss their mutual problems. The physical therapist should report the patient's progress; and this progress report should include any unusual symptoms or adverse reaction or the failure of a patient to respond properly within a reasonable time.

**Physical Therapy Records**
A well qualified physical therapist will keep the following types of records:
- Medical diagnosis and prescription (by physician)
- Daily record of treatment given
- Progress report
- Postural examination chart (as indicated)
- Muscle test chart (as indicated)
- Joint range chart (as indicated)
- Electrical examination and diagnosis chart (as indicated)
- Resistance exercise record chart (as indicated)
- Therapeutic exercise chart (as indicated)
- Activities of daily living chart (eating, dressing, resting, etc.) as indicated

**Some Indications for Physical Therapy**
Although the majority of patients treated come from the orthopedic and neurological categories, patients from a wide variety of diagnostic groups may benefit from physical therapy. In a general hospital, for example, virtually every service may recommend physical therapy for some of its patients. A list of types of cases treated by a representative number of physical therapy departments follows. This list is to be regarded as typical rather than exhaustive.

- *Arthritis*
- *Burns*
- *Cerebral disease and injury, such as cerebral palsy, cerebral vascular lesions, congenital deformities, such as club feet and torticollis*
- *Dislocations*
- *Fractures*

**Joint and muscle disease and injury**
- Obstetrical and gynecological conditions
- Peripheral nerve disease and injury
- Peripheral vascular conditions
- Postoperative surgical conditions
- Postural psychic conditions, such as conversion hysteria
- Skin disease and injury
- Spinal cord disease and injury, such as polio
- Myelitis, multiple sclerosis, traumatic lesions

**Treatment Modalities**
- **Thermonotherapy**
  - Heat (diathermy, infra-red, hot packs, paraffin bath)
  - Radiation or light (infra-red, ultraviolet)
- **Hydrotherapy**
  - Hydrotherapy or water (whirlpool bath, contrast bath, Hubbard tub, needle spray, cold and hot packs)
- **Electrotherapy**
  - Electrical stimulation, ion transfer, short and long wave diathermy
  - Massage (general, local, relaxing, stimulating)
  - Therapeutic exercise (passive motion, active assistive motion, active motion, resisted motion; breathing, posture and gait training; muscle re-education; coordination and rhythm exercise; stretching; underwater exercise)
  - Miscellaneous (bandaging, strapping, removal and reaplication of splints and casts as prescribed)

**Diagnostic Testing**
The kinds of diagnostic testing for which the physical therapist may be responsible include (1) voluntary muscle testing (muscle power), (2) electrical muscle testing, (3) joint measurements and (4) functional activity testing (such activities of daily living as eating and drinking, dressing and undressing).

The amount of diagnostic testing which the therapist is expected to do varies from center to center. In all instances where it is performed, it is carried out under the prescription and general supervision of the physician.

**BIBLIOGRAPHY**
The purpose of this bibliography is to acquaint you with some of the typical source material available in the field of physical medicine, and should not be considered exhaustive.

**General Textbooks**
1. Kruzin, F. H., Physical Medicine, Philadelphia, W. B. Saunders Co., 1941

**Maryland State Medical Journal**

**Electrotherapy**
1. Bierman, William, Medical Applications of the Short Wave Current, 2nd ed., Baltimore, Williams & Wilkins, 1942

**Textbooks Related to Specific Modalities**

**Hydrotherapy**
2. McCullough, W. S., Hydrotherapy, in Modern Medical Therapy in General Practice, edited by D. P. Barry, Baltimore, Williams & Wilkins, 1940, pp. 415-444

**Massage**
2. Böhm, Max, Massage; its principles and technic, edited by C. F. Painter, Philadelphia, W. B. Saunders Co., 1913

**Therapeutic Exercise and Muscle Testing**
3. Kendall, H. O., and Florence P., Muscles; testing and function, Baltimore, Williams & Wilkins, 1949

**Ampullations**

**Arthritis**
(refer to general textbooks and articles in the periodicals)

**Burns**
(refer to general textbooks and articles in the periodicals)

**Cerebral Disease and Injury**
Articles of Interest

Congenital Deformities, Fractures, Dislocations, Joint and Muscle Disease and Injury

1. Standard textbooks on Orthopedic Surgery
2. Journal of Bone and Joint Surgery

Refer to general physical medicine textbooks and periodicals on the following conditions:
- Obstetrical and gynecological conditions
- Peripheral vascular conditions
- Post-operative surgical conditions
- Peripheral nerve disease and injury
- Psychiatric conditions
- Skin diseases

Spinal Cord Disease and Injury

4. Source material may be secured from the American Foundation for Infantile Paralysis

Periodicals

1. Archives of Physical Medicine
   American Congress of Physical Medicine
   30 N. Michigan Avenue, Chicago 2, Illinois

2. Journal of Bone and Joint Surgery
   American Orthopedic Association
   8 The Fenway, Boston 15, Mass., 1
3. Physical Therapy Review
   American Physical Therapy Association
   1790 Broadway, New York 19, N. Y.
4. British Journal of Physical Medicine
   British Journal of Physical Medicine and Industrial Medicine
   Butterworth & Co., Ltd.
   4-6 Bell Yard, Temple Bar, W. C. 2, London, England
5. Physiotherapy, Journal of the Chartered Society of Physiotherapy
   Taylorstock House
   Cavistock Square, London

6. American Journal of Physical Medicine
   Williams & Wilkins Co.
   Baltimore, Md.

7. Journal of Rehabilitation
   National Rehabilitation Association
   1025 Vermont Avenue, Washington 5, D. C.

Organizations

Complete source material and reviews of all recent publications pertaining to these areas may be secured from the following:

1. National Foundation for Infantile Paralysis
   120 Broadway, New York 5, N. Y.
2. National Society for Crippled Children and Adults, Inc.
   11 S. LaSalle St., Chicago, Illinois
3. National Rehabilitation Association
   1025 Vermont Avenue, Washington 5, D. C.
4. United Cerebral Palsy Association
   50 W. 57th Street, New York, N. Y.
5. National Multiple Sclerosis Society
   270 Park Avenue, New York 17, N. Y.