

**J. Neurol. Neurosurg. Psychiat., 33, 5, Oct., 1970:**

GILLIATT, R. W., LE QUESNE, P. M., LOGUE, V., *et al.*:  
Wasting of the hand associated with a cervical rib  
or band.

*Summary:* Nine patients presented unilateral wasting of the hand muscle associated with either an elongated transverse process of C/7 or a cervical rib. In almost all cases sensory disturbances preceded the motor changes. At operation, all cases showed a fibrous band extending from C/7 transverse process or the rudimentary rib to the region of the scalene tubercle, which had caused angulation and often visible pathological changes in either the lower roots or the lower trunk of the brachial plexus. Whilst sensory symptom were relieved following operation, weakness and wasting were only arrested and appeared little improved even after periods of up to eight years after the operation.

**J. Neurosurg., 33, 4, Oct., 1970:**

SCHNEIDER, R. C., GOSCH, H. H., NORRELL, H., *et al.*:  
Vascular insufficiency and differential distortion of  
brain and cord caused by cervicomedullary football  
injuries.

*Summary:* A rather horrifying account of injuries sustained at American football, interesting because the mechanisms of injury are not only discussed, but also illustrated by photographs taken at the moment of the accident.

**J. Appl. Physiol., 29, 6, Dec., 1970:**

PETRO, J. K., HOLLANDER, A. P., and BOUMAN, L. N.:  
Instantaneous Cardiac Acceleration in Man induced  
by a Voluntary Muscle Contraction.

*Summary:* In a study of health subjects the authors consistently found an instantaneous acceleration in the heart rate following upon a short static biceps contraction. They cite other literature to support their hypothesis that the muscle spindles may be the receptors for a reflex decrease of vagal dominance on the heart rate, but recognise that the pathway to the cardioinhibitory centre is not yet established.

**Annual Review Physiol., 32, 1970:**

SANDOW, A.: Skeletal Muscle.

Summarises research done and published on skeletal muscle during the two years ending July, 1969. Over 300 references are given.

**Yearbook of Neurology and Neurosurgery, 1970:**

DE JONG, R. N., and SUGAR, O. (editors).

Reviews literature published in the year ending October, 1969, including both books and journals. The sections in this issue of most interest to physiotherapists are probably those on Neuroanatomy and Neurophysiology, Myopathies and Parkinson's Disease (in the section on Neurology) and those on Trauma, Disk Disease and Involuntary Movements (in the section on Neurology). The other sections, unfortunately, contain little of practical interest to the physiotherapist.

S. IRWIN-CARRUTHERS

**OTHER ARTICLES OF INTEREST****Am. J. Occ. Ther., 14, 7, July, 1970:**

CURRERI, P. W., and PRUITT, B. A.: Evaluation and  
Treatment of the Burned Patient.

**Ibid., 14, 8, August, 1970:**

VON PRINCE, K. N. P., CURRERI, P. W., and PRUITT, B. A.:  
Application of Fingernail Hooks in Splinting of  
Burned Hands.

**Am. J. Physiol., 219, 5, Nov., 1970:**

OTSUKA, M., and ONTSUKI, I.: Mechanism of muscular  
paralysis by insulin with special reference to periodic  
paralysis.

**Arch. Neurol., 23, 3, Sept., 1970:**

BRODY, I. A., and ROZEAR, M. P.: Contraction Response  
to Muscle Percussion—Physiology and clinical  
significance.

**Develop. Med. and Child Neurol., 12, 5, Oct., 1970:**

BRINK, J. D., GARRETT, A. L., HALE, W. R., *et al.*:  
Recovery of Motor and Intellectual Function in  
Children Sustaining Severe Head Injuries.

**J. Applied Physiol., 29, 4, Oct., 1970:**

KROEMER, K. H. E., and GIENAPP, E. M.: Hand-held  
device to measure finger (thumb) strength.

**J. Neurol. Neurosurg. Psychiat., 33, 5, Oct., 1970:**

STALBERG, E., and TRONTEJL, J. V.: Demonstration of  
axon reflexes in human motor nerve fibres.

**Ned. tijd. voor fysio., 80, 11, Nov., 1970:**

ROZENDAL, R. H., en CHATINIER, K.: Analyse van het  
gangpatroon van jongens, meisjes en jonge vol-  
wassenen.

**Ibid.:**

KLASING, W. E.: Ultrageluid-therapie.

**Ibid., 80, 12, Des., 1970:**

DRIESENS, D. J.: Een beknopt overzicht van de behande-  
ling met tractie.

**S.A. Med. J., 44, 40, 1 147, Oct., 1970:**

PILKINGTON, P.: Sports and Athletic Injuries, a Physio-  
therapist's Approach.

**SPECIALLY RECOMMENDED****Supplements to "Neurology":**

1. The Torsion Dystonias (Dystoria Musculorum Deformans), *Neurology* 20, 11, Part 2, Nov., 1970.
2. Pharmacologic and clinical experiences with levodopa: A symposium, *Neurology*, 20, 12, Part 2, Dec., 1970.

**BOOK REVIEW**

**PHYSICAL THERAPY EXAMINATION REVIEW BOOK, VOLUME II.** Clinical Application by R. A. Hershey, B.A., M.A., R.P.T. Publishers: Medical Examination Publishing Co. Inc., 65-36 Fresh Meadow Lane, Flushing, N.Y. 11365.  
Price \$7.00.

This is a book consisting of 2 000 multiple choice questions, the answers of which are referenced to standard textbook of Physical Therapy in America.

This form of testing and examining is not widely used in the medical and paramedical fields in South Africa at present, however, a trial run is being considered by our Universities in the M.B.B.Ch. examinations in selected subjects.

The advantage of multichoice questions is the tremendous fields that can be covered in any one subject, but depth of knowledge cannot be tested by this method.

This is a very comprehensive volume, it has 10 sections. 1 200 questions are related to aspects of Pathology, Medicine Psychiatry, Orthopaedics, Surgery, Dermatology and Clinical Neurology. The balance being devoted to Electrotherapy, and a section headed Application which is mainly mechanics of movement and applied anatomy.

Each question is referenced. The references are limited to 19 text books of which three are commonly used in our own schools.

However, I would highly recommend this book to students for revision work as a method of testing overall familiarity with the subjects, but not as a substitute for their regular text books. I also think that this comprehensive volume could form a basis for teachers' symposia on the value of this method of examining as against the present methods generally practised.

J.B.

## BOOK REVIEW

**Physical Therapy Procedures.** Selected Techniques by Ann H. Downer, B.A., M.A., L.P.T., Publishers — Charles C. Thomas, Springfield, Illinois, U.S.A. 16 Illustrations. 174 pages. 1st Edition 1970. Price \$7.95.

This book is a new approach to physiotherapy techniques and its application, consisting of 32 chapters, bibliography and an index.

The *Introductory Chapter* gives the usual information required in the preparation and treatment of patients. More emphasis could have been given on skin testing and warning the patient that some treatments could be dangerous, that no earthed conductors are in close proximity and checking if sensitisers are not being used or taken.

No mention is made in *Chapter Two* of protective mesh screens when using luminous type I.R. lamp. These lamps should be placed parallel to the skin surface rather than directly over the patient. The rheostat control for increasing or decreasing the intensity is not mentioned. "Bakers" is a U.S.A. term for luminous I.R. cradles. The term "Burn" is used where scald would probably be more appropriate, but this is constant throughout the text. Moist air or humid baths are rarely used in this country, except as a Sauna Bath.

In the section on *Wax Baths* the initial application temperature appears to be rather high. The method of cleaning and sterilising the wax differs from that in current use here.

The use of air as a dielectric in *Short Wave Diathermy* is considered safer than the use of towelling wherever possible. Two and a half times the skin electrode distance is considered adequate, and not ten inches as quoted in the book for co-planar techniques. With the majority of modern machines, once resonance, has been obtained, it is not necessary to re-tune after altering the intensity. Testing of the machine and warning the patient that the treatment could be dangerous is essential.

In *Microwave*, weal applicators i.e. 35 mm or less can be used in contact with the skin.

With *Ultra Sound* the machine should be tested in water and on oneself before using on a patient. A wooden spatula and not the transducer head should be used to spread the coupling medium, and it is not customary to use water below skin temperature for underwater treatments.

The types of *Ultra-Violet Sources* differ from those at present in use here; it is common practice to give the patient a copy of the shapes used in the test dose to record the correct aperture. Patients must wear the same clothing for each successive treatment.

In *Intontophoresis* the indifferent pad is usually twice that of the active pad. With abnormal skin conditions treatment is usually contra-indicated. A dosage of 2 m.a. per square inch or the patient tolerance is the usual dose given. Similarly with Direct Current bandaging is recommended to prevent the danger of shock to a patient. The techniques described are not considered good.

*Electrical Stimulation.* It depends on the patient's response as to whether the anode or kathode is used for the active or indifferent electrode and is used by testing. The co-planar technique is used for denervated muscles and the point of best contraction is found by test and should be stimulated for as long as possible or until fatigue sets in, the muscles being placed in a shortened position with the type of machine in use in South Africa the intensity control should be reduced before turning back to the rheobase to check.

The *Galvanic-Tetanic* test is not used in this country. *Combined U.S. and Electrical Stimulation* also *Trigger Points* as the type of low frequency current used is not indicated, the techniques described are of little use. It is felt that *Tank or Poor Hoist* should precede the chapters on *Hubbard Tank and Therapeutic Pools.* The *Combined Moist Heat and Electrical Stimulation* units are not in use in South Africa. The *Bibliography* is good also the *Index* which is cross-referenced.

The book appears to fall short in regards to students in that it does not have sufficient detail and explanations, giving reasons for the various techniques and selection of the most suitable apparatus. To the qualified staff there is a tremendous amount of repetition. It is of very limited value to students and physiotherapists in South Africa for the above reasons. Secondly, all the equipment described in the book is not freely available in this country. It would be of value to physiotherapists who wish to visit the United States of America.

## NATAL PROVINCIAL ADMINISTRATION

Suitably qualified persons are invited to apply by not later than 2nd July, 1971, for the undermentioned posts.

Application forms are obtainable from the Medical Superintendent of any Provincial Hospital in Natal or from the Director of Hospital Services, Private Bag 9051, Pietermaritzburg. The completed forms should be returned to the Director of Hospital Services.

### TUTOR PHYSIOTHERAPIST: PROVINCIAL MEDICAL REHABILITATION SERVICES, DURBAN

Commencing salary: R2 700 per annum.

Duties: Tuition in all aspects of Physiotherapy training: theoretical, practical and clinical.

### PHYSIOTHERAPIST: ADDINGTON HOSPITAL, DURBAN: 6 POSTS

Commencing salary: Up to R2 700 per annum.