

ABSTRACTS/OPSOMMINGS

Geriatrics is the theme of two issues of Physiotherapy (1976, 62, 146 - 159; 1976, 62, 178 - 184).

A series of ten articles covering a wide spectrum of the subject, written from the point of view of the physiotherapist's involvement. The subjects covered are: Preventative Aspects; Day Hospitals; A Stroke Unit; Mental Illness; Interdisciplinary Teamwork; Diagnosis; Nutrition; Incontinence. Of interest is the emergence of the Psychogeriatric Day Hospital in the U.K., its uses and functions (*The Day Hospital*, Brocklehurst, J. C., pp. 148-150). *The Place of a Stroke Unit within Geriatric Medicine* (Isaacs, B, 152 - 154). These units are rapidly increasing in relevance in to-day's society. *Mental Illness in the Elderly* (Robinson, R. A. 155 - 157) clarifies many points which are encountered both professionally and socially. Emphasis is placed on the need for more education in this field. *Incontinence* (Mandelstam, D. A. 182 - 184) stresses the role which the physiotherapist can play in managing this common geriatric symptom. Of particular importance is a statement which is well worth quoting: "Geriatric wards are still peopled by Victorians, and the attitudes of their generation must be taken into account. Bodily functions for many remain unmentionable. Imagine then the anxiety and embarrassment caused by asking strangers for assistance." Another point brought out is boredom and lack of stimulus. This leads one to ask "of what value is the Geriatric Ward Class?" Anyone who has dealings with the elderly, both professionally and socially will find something of value in these articles. They are well-referenced throughout, and a Bibliography of 184 items is given. This is an aspect of our work which is becoming more and more important as life-expectancy increases.

H.C.W.

Parker, M. J.: Chronic Obstructive Pulmonary Disease: The Role of Physiotherapy. *Physiotherapy Canada*, October 1977, Vol. 29, No. 4.

The article is chiefly concerned with the treatment and care of the patient with centrilobular emphysema linked with chronic bronchitis and cor pulmonale. Case-finding is discussed and suggestions on how to get early referrals are made. A community screening programme is suggested. Out-patient- and home care are emphasised as important.

Treatment objectives include increasing alveolar ventilation through general relaxation and careful re-training of breathing. Several important points are made with regard to breathing exercises: Increasing the tidal volume decreases the rate of breathing and, since the flow of air is slowed down, results in more even ventilation. Pursed lips breathing helps the patient who suffers from a high closing volume. Deliberate desensitisation to dyspnoea should be obtained. The objective of matching perfusion to ventilation is partially realised by postural drainage. The reduction of the energy cost of breathing, another aim of treatment, is achieved by helping the patient to slow his respiration rate. Inspiration is lengthened slightly and breathing out is done in a relaxed way. If exercises alone cannot improve the mobility of the chest wall, passive movements of the rib cage may also be necessary.

To obtain optimal use of oxygen by the body musculature, relaxation and correct posture (which puts the muscles at a mechanical advantage) should be taught. Exercise tolerance should also be improved. It is important for the physiotherapist to educate the patient and help him to take full responsibility for the care of his

chest. She does this by training him to keep his chest clear and to keep fit.

The need to study the effectiveness of physiotherapy in C.O.P.D. is stressed; far more research needs to be done on the treatment of early cases. The writer suggests that there is also a need for study of the physiological basis of retraining of breathing, and of the methodology of increasing exercise tolerance in pulmonary patients. A comprehensive list of references is given.

J. M. Hill

Journal of the Rhodesian Physiotherapy Association — January 1978.

This Journal is to be commended to our members. In this issue a stimulating editorial on "Experience does not mean age" is followed by several interesting and topical articles.

Many Rhodesian medical problems relating to a variety of racial groups in the country are similar to ours, but with added problems arising from conditions of the terrorist war, as demonstrated in an article on abdominal trauma by Mr. G. F. Grave, Head of the Department of Surgery, Bulawayo United Hospitals.

Other articles in this issue discuss paraplegia, the use of intermittent positive ventilation in the treatment of respiratory disorders, some aspects of pathology laboratory results, as well as the image of physiotherapy, physiology of handicap, and international co-operation among physiotherapists.

The editors have indicated that they are prepared to advertise any courses held in the Republic free, provided it is not a display advertisement. Single copies of this Journal are \$1 (Rhodesian) post-free. Inquiries regarding subscriptions should be made to the Editor.

P. Chatterton

MacMaster, W. C. (1977). A literary review on ice therapy in injuries. *Amer. J. Sports Med.*, 5, 3.

Heat and cold have dissimilar and in a large part reciprocal physiological effects. Collagen under non-physiological conditions exhibits viscous properties or plastic deformation as well as the visco-elastic properties of creep and stress relaxation. Heat decreases the resistance to plastic deformation, whilst cold enhances the elastic properties of collagen. Cold affects muscle activity in various ways and depresses the excitability of free nerve endings and peripheral nerve fibres, increasing their threshold to pain. Cold also produces a reduction in blood flow, inflammatory response, local oedema and haemorrhage. The contra-indications, indications and applications of ice therapy for various types of lesion are discussed; prolonged application of cold for treating the acute injury is advocated.

M. J. Runnalls

Paraplegia 1976, 13, 223-226. Cervical Cord Injury following Chiropractic Manipulation — Ringay Reynolds, Jameson and Hamilton.

The case history is given of a patient who, following a fall, was treated for "pain in the neck" by manipulation, and his subsequent tetraplegia. A discussion follows of complications arising from ill-advised manipulation of undiagnosed pre-existing spinal disease. It is a clear warning of the need for care and an accurate diagnosis being furnished before treatment is given.

H.C.W.

BOOK REVIEW

VERTEBRAL MANIPULATION. G. D. Maitland. 4th Edition. Butterworths, London, 1977. Available from Butterworth & Co. (S.A.) (Pty.) Ltd., P.O. Box 792, Durban 4000.

Vertebral manipulation has become a standard textbook in many teaching institutions in this country. This new edition is indicative of the dynamic approach of Mr. Maitland, and is enhanced by better captions. There are several improvements to the chapter on examination. The testing of muscle strength of muscles innervated by the C1, C2 and C3 nerve roots is included. A more detailed initial examination procedure for cervical, thoracic and lumbar problems inclusive of the planning of the objective examination is documented.

Treatment techniques continue to be most adequately described and illustrated. The additional section on mobilisation of the ribs is welcome. However, I join the sentiments of the reviewer of this book for the Chartered Society of Physiotherapy in requesting that the fifth edition include the examination and treatment of sacro-iliac joint problems.

The greatest innovation is the inclusion of a chapter on assessment. Mr. Maitland says "Without assessment, treatment is merely an application of techniques lacking guidelines." Furthermore he says "It is universally accepted that medical diagnosis of spinal conditions is extremely difficult. However, a diagnosis indicating that no disease process is involved is usually possible. From the manipulative therapist's point of view the main concern, once the patient has been referred, lies in appreciating the mechanical factors related to each patient's symptoms." Mr. Maitland pursues his line of action by virtue of a "left and right compartment." Factors such as the history, signs and symptoms and which are indisputable fall into the "left compartment" whereas disputable facts such as the biomechanics, pathology and diagnosis fall into the "right compartment." Application of treatment is based on the factors in the "left compartment" but never losing sight of the factors in the "right compartment." Assessment of the "left compartment" factors at the initial examination, at the beginning, the end and during each treatment session as well as at the end of a treatment series is essential "to the whole purpose of assessment; IMPROVING THE VALUE OF EACH TREATMENT TECHNIQUE". The two appendices at the end of the book elucidate some of the specific factors which need to be assessed.

Mr. Maitland discusses for the first time manipulation under anaesthesia (M.U.A.). There are definite indications for manipulation of a conscious patient and for manipulation under anaesthetic. Sometimes, patients may require a balance of both.

The *Journal of Bone and Joint Surgery's* reviewer of the third edition of this book said "I would respectfully suggest that this book is a MUST for Physical Medicine Departments and a SHOULD for most orthopaedic surgeons." I would suggest that this book is also a MUST for all physiotherapists working in this field and all physiotherapy students especially as movement diagrams now form part of the syllabus.

M. J. Runnalls

Maitland, G. D. — Peripheral Manipulation. 2nd Edition. Butterworths, London, 1977. Available from Butterworth & Co (S.A.) (Pty) Ltd., P.O. Box 792, Durban 4000 at R26,95 (plus 40c for delivery).

The opening chapter of this book defines and states the role of mobilization and manipulation, pointing out

especially the relief of pain obtained by using special passive movement techniques. The subjective and objective examination of peripheral joints is detailed and the most salient points stand out clearly in the text eg.

The aim of examining movements is to find one or more comparable "signs" in an appropriate joint or joints.

"Many anomalies occur in the clinical situation which do not entirely agree with what is known anatomically and physiologically". The text demonstrates this admirably by referring to the movement between the capitate and the hamate.

In the chapter on principles of technique, a useful addition is the grading of movement in the hypermobile joint. Further excellent additions in this edition are: (1) A chapter on assessment, the crux of successful treatment, where the role of assessment at the initial examination and treatment session, during a treatment session and also over a period of treatment, at the end of treatment, and to assist in differential diagnosis is discussed, and: (2) A chapter on treatment, where the use of treatment movements to relieve the pain, improve the painless stiff joint which does not have a functional range, treat resistance in a joint disorder whilst not exacerbating pain, and replace torn structures or loose bodies within a joint, are described in detail. There is also a section on treatment related to pathology. The lack of reference to pathology was perhaps the greatest drawback in the first edition of this book, and its inclusion in this edition is truly welcome.

Still more allusions to pathology are made in Part II of this book. Here the specific objective examination including special and quick tests used to determine joint problems, and the techniques for treatment and management of each peripheral joint are clearly described and/or illustrated. The book concludes with a chapter on recording treatment and two appendices which describe the mechanics of movement diagrams.

This book is a true gem for the manipulative therapist. Mr. Maitland must again not only be congratulated on his presentation of a subject to which he is obviously clearly dedicated, but also be commended because our patients will surely benefit if physiotherapists use the knowledge gained from this improved and most excellent edition of *Peripheral Manipulation*.

M. J. Runnalls

Cash, J. E. (1976). A Textbook of Medical Conditions for Physiotherapists. 5th Edition. Macmillan, London.

This book is divided into four sections, with the bibliography listed at the end of each section — a more practical arrangement than previously. Apart from the sections on general pathology and paediatrics, the authors of the sections differ from those in previous editions. The general introduction to each section arouses more interest than the usual standardized dry and factual textbook. Free use is made of illustrations, more especially in the section on rheumatology, but they are lacking in the section on skin diseases where they could be valuable in illustrating the application of ultraviolet light.

Pathology and treatment have been brought up to date and the point-by-point layout with clear headings and subdivisions makes for easy reference; grouping is also more logical. Apart from the first section on general pathology and treatment, pathology has been very condensed and is sometimes insufficient.

The second section, rheumatic disorders, has been considerably enlarged and re-organized. The inclusion of more detailed drug therapy and indications for its use in the treatment of joint disease, as well as the