ABSTRACTS

The Use of Transcutaneous Nerve Stimulation in the Management of Chronic Pain. Herman, E.. Physiotherapy Canada, 1977, 29, 65-71.

The author points out that pain is now regarded in some instances as being a pathological state *per se* which requires careful examination and treatment. A summary of the neurophysiological aspects of pain is followed by a discussion of the reverbatory circuit and the gate control theories regarding the neural mechanisms which underlie pain transmission. The gate control theory of Melzack and Wall is accepted as the most comprehensive theory to date, although some aspects are still controversial.

The effects of transcutaneous nerve stimulation (TCN or TNS) on pain are explained in terms of neurophysiology. The rationale of treatment appears to be that large nerve fibres may be selectively stimulated and may then set a "gating" mechanism in motion which blocks small fibre activity. This then prevents the transmission of pain impulses.

The application procedures of TNS and the precautions and complications involved are described. The results of TNS used on a group of 207 chronic pain sufferers are tabled and analysed. Forty-one per cent of the patients experienced long lasting relief. The results of this study correlated well with results of similar studies elsewhere. The author concludes that if used intelligently and judiciously TNS is a useful modality in the treatment of chronic pain.

There is a comprehensive list of references which would be of use for further study.

J.M.H.

Grading of Spasticity & its Effect on Voluntary Movement. Goff, G. Physiotherapy, 1976, 62, 358.

The writer has attempted to grade spasticity from a clinical point of view, according to its effect on voluntary movement in various positions of the body: e.g. supine with the head in various positions relative to the body, right- and left-sided lying, sitting and standing. A sample assessment form is given, also a description of the grades from O-solely spastic to 5-no spasticity. A description of grades of spasticity related to function is also given. Its value is given in terms of diagnosis, prognosis, treatment planning and possible research. This article should be of particular value to those who work with spasticity from whatever cause.

H.C.W.

Burns. Physiotherapy, 1977, 63, 146-158.

Five articles are included: (a) Burns: Emergency treatment and resuscitation. Settle. pp. 146-150. (b) Respiratory conditions in burned patients. Brown. pp. 151-153. (c) Physiotherapy in the treatment of burns with inhalation problems. Wootton & Hodgson. pp. 153. (d) Surgery and infection of the burn wound. Cason. pp. 154-156. (e) Physical treatment and rehabilitation for burns. Hales. pp. 157-153.

These articles give a comprehensive and clear picture of the burns victim, from the points of view of various disciplines within the rehabilitation team. They should prove invaluable for those dealing with burns, for those wishing to find out more about the treatment, and as a reference for students, even for those whose work does not cover this area it makes most interesting reading. It is well illustrated and documented throughout.

H. C. W.

The Vastus Medialis Controversy. Speakman-Wesberg. Physiotherapy, 1977, 63, 249-154.

A well-documented article summarizing the history to date of the controversy over the role of vastus medialis in final extension of the knee. The conclusions are logical and well reasoned, and should give some of the "old debenchers" at lot of food for thought and discussions.

H.C.W.

Efficiency of Ultrasound Coupling Agents. Reid and Cummings. Physiotherapy, 1977, 63, 255-257.

Aquasonic gel, glycerol, water, ECG couplant and liquid paraffin were tested as ultrasound coupling agents, and found to be efficient in the order given, in terms of transmission of ultrasound from transducer to tissue. Glycerol was an acceptable substitute for Aquasonic gel, the most expensive. Liquid paraffin, the most commonly used coupling agent, came last with a surprising 20% coupling property. There is enough variation for the couping agent to be taken into consideration when dosage and time are calculated. The article is well documented, and illustrated with graphs and tables.

H.C.W.

OPSOMMINGS

Diadynamische stroomvormen en Adrenaline — Een verband? Dikhoff, F. J. J., Denkers, J. P. I. en Schaasberg, K.P. Net. Tijdschr. Fysiother., 1977, 87,140.

In hierdie artikel word ingegaan op die invloed wat diadinamiese strome mag hê op die produksie van katacholamiene, veral adrenalien. Eers word die organe bespreek wat katacholamiene vervaardig en dan word die biochemie daarvan behandel. Nadat die effekte van diadinamiese strome bespreek is, o.a. die sirkulasietoename in arms en bene, moontlik ook onder invloed van adrenalien ,word afgesluit met 'n gevalle-studie van twee pasiënte met rugklagte.

B.G.

Lenigheid/rekking. Stuy, P. W. Ned. Tijdschr. Fysiother., 1977, 87, 159.

In hierdie artikel word ingegaan op die nut van rekkingsoefeninge vir die verskillende spiere en ligamente van die liggaam. Kortliks word eers die oorsake van verkorting behandel. Daarna word die nadele bespreek wat hierdie verkortings mag inhou vir funksie, organe, sirkulasie en bewegingsapparaat van die liggaam. Nadat nagegaan is hoe hierdie rekking van spiere en weefsels moontlik tot stand kom en indikasies en kontra-indikasies vir rekkingsoefeninge gegee is, word die verskillende oefeninge beskrywe waarby foto's dit nog meer verduidelik.

B.G.

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INTRODUCTION TO RESEARCH METHODS

Two tapes by Mr. Coetzee and Mr. le Roux on the above are available on loan from the Obstetric Association. Fee R2,00 for members and R5,00 for non-members for a maximum of two weeks.

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