### **ABSTRACTS**

#### Ashcroft, P. J., Prevention and Treatment of Injuries in Distance Runners. Physiotherapy Canada, 1978 30, 15-18.

This article deals specifically with the indirect and fronic overuse injuries encountered by distance runners. The author has obviously been influenced by Dr. Subotnik and the podiatric approach to these injuries and feels that many of these injuries could be

a result of biomechanical faults in the foot.

The introduction deals with the stress placed by distance running on not only the skeletal system but also the circulatory, respiratory and excretory systems. Training is defined as coaxing from the body a series of changes by applying graduated stress. The basic rules of training as given are regular (daily) training with frequent easy or rest days; the amount of daily training should not exceed one third of the distance or time that the runner expects to race; and 95% of the training is long, slow distance and the remaining 5% speed work.

The physical and physiological characteristics of distance runners are described. The need for an exceptionally large VO2 maximum value is noted. Runners may also need to alter their lifestyle with regard to diet, alcohol consumption and cigarette smoking.

The following section deals with the classification of injuries (direct, indirect and chronic overuse) and with injuries at specific sites. The cause of each injury is described. The most common factors seem to be overuse, with insufficient rest days; inadequate footwear; biomechanical problems of the foot and unequal legngths which place abnormal stresses on the foot, hee and hip joints; and muscle imbalance between anterior and posterior compartments.

Treatment modalities include ice; compression over muscle injuries; relieving pressure over painful areas in the foot by using sponge-pads; diadynamic current to relieve pain; stretching and strengthening exercises; and the prescription of either good supportive or cor-

rective footwear if necessary.

When rest is necessary, as in the case of stress fractures, swimming and cycling are recommended to maintain cardio-vascular fitness. Anti-inflammatory drugs may be prescribed, but hydrocortisone must never be injected into a weight-bearing tendon.

Pain in the lumbar region is treated conservatively with initial bedrest, a firm bed, ice-packs; progress to gentle mobilisation, abdominal exercises and stretching exercises for the erector spinae, hamstring, gastrocnemius and iliopsoas muscles.

Shoulder joint pain is said to be vascular in origin; raising the arms above the head alternately when running will relieve the pain, should it develop.

The article provides an interesting overview of the topic, but is not very specific.

Rankine-Wilson, J: Ageing: What abilities are lost? Australian Journal of Physiotherapy 1977, 23, 100 -

The author discredits the widely-held view that the pattern of befuddled and rigid old age is due to the agerelated deterioration of the brain, supposedly starting at 25 years. She points out that this view is based on a study of ten brains, two of which were those of old patients who had died in a hospital for the insane! She questions whether deterioration in levels of performance are not, in fact, the results of such factors as nutrition; general health; I.Q.; educational level, previous vocation and motivation. The phenomenon of the early death of recently retired people who lack a purpose in life is well known. The results of various tests, performed on groups of old and young subjects, are discussed. The effects of exercise on the physiological and psychological performances of geriatric patients is discussed, and it is interesting to note that a control group receiving the same social stimulus but not the exercise programme did not fare as well as those who

The author finally points out our responsibility in promoting stimulating prophylactic programmes for the elderly - thus making a valuable contribution towards their improved living conditions — and, ultimately, our own.

This thought-provoking article will be of interest to all those who have dealings with the elderly patient.

H. C. Watts

### Physiotherapy 1977, 63, 350 - 359. Five Congress lectures on the subject of Physiotherapy in the Community.

M. D. Warren, in his lecture "The Right Treatment in the Right Place" outlines the reasons for developing Community Care, and its planning and management, with particular emphasis on the physiotherapist. He also defines a basis on which to establish the priorities of treatment, and gives pointers towards possible research in this field.

The second lecture, "Physiotherapy in the Community" by C. J. Partridge, discusses more fully the rôle of the physiotherapist so employed. The third one, "Community Physiotherapy in West Berkshire" by O. L. Clark, describes the problems encountered in initiating this service, the considerable advantages it has brought to the home-bound patient, and the advisory rôle which the physiotherapist undertakes. The two final lectures corroborate this.

These articles will be of particular value to those physiotherapists employed in Day Hospitals, or who, in the course of duty, need to visit patients in their own home.

Abstracts (continued)

South African Medical Journal, 1978, 53 (pp. 306 et seq & 319 et seq)

Cerebral Palsy — Is it Preventable? — L. J. Arens Cerebral Palsy in Cape Town — A Comparative Twelveyear Retrospective Study — L. J. Arens, C. D. Molteno, S. R. Marshall, W. I. Robertson, J. Rohkin.

The incidence of cerebral palsy among coloured and whites for the two six-year periods between 1964 and 1975 is compared with regard to aetiology and changing incidence. The conditions for birth and age of referral are discussed and the many causes are clearly categorized and set out. It is suggested that improved obstetric and neonatal services will bring down the high incidence of cerebral palsy. These articles should be of value to all persons interested in these children, or concerned with the condition in any way at all.

(Mrs.) H. P. Maree

Vraciu, Jean S. & Robert, A.: Effectiveness of Breathing Exercises in Preventing Pulmonary Complications Following Open Heart Surgery. Physical Therapy 1977: 57, 1367 - 1371.

The authors describe a study designed to test the effectiveness of this treatment. Patients in the experimental group were divided into high- and low-risk subjects. All patients were given one preoperative teaching session and twice daily treatment for four days following extubation. The results, particularly in the high-risk patients, were found to fully justify the treatment: It was of particular interest to note that this form of treatment was observed to be far less traumatic than postural drainage and percussion. The findings are well substantiated.

H. C. Watts

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