the present study, was forced by severe fatigue to stop running after completing about 22 km of the race in a time of approximately 1 hr 40 min. After waiting some time for transport back to the finishing point, he arrived, still wearing only his running gear consisting of vest, shorts and shoes, in a state of collapse. On arrival at the first-aid point, rectal temperature was measured by one of the investigators in the present study and was found to be 33.4°C. This finding is similar to that reported by Ledingham et al (1982) who reported a rectal temperature of 34.3°C in a runner who collapsed near the finishing line; again there was some delay between the cessation of exercise and the measurement of rectal temperature.

In conclusion, these results confirm that hypothermia is potentially more of a problem than hyperthermia in marathon races held in cool climates, particularly among the slower runners. Those most at risk are runners whose speed decreases sharply at any stage of the race.

ACKNOWLEDGEMENTS

The authors thank Dr. J. Ferguson for assistance with data collection and the subjects for their willing co-operation. J. B. Leiper is supported by a grant from Armour Pharmaceutical Co. Ltd. and R. J. Maughan is supported by a grant from Shell Expro (UK) Ltd.

References

- American College of Sports Medicine, 1975 "Position statement on prevention of heat injuries during distance running". *Med.Sci.Sports Ex.* 7: vii-ix.
- American College of Sports Medicine, 1984 "Prevention of thermal injuries during distance running". *Med.Sci.Sports Ex.* 16: ix-xiv.
- Costill, D. L., 1972 "Physiology of marathon running". *JAMA* 221: 1024-1029.
- Hughson, R. L., Green, H. J., Houston, M. E., Thomason, J. A., MacLean, D. R. and Sutton, J. R., 1980 "Heat injuries in Canadian mass participation runs". *Canad.Med.Ass.J.* 122: 1141-1144.
- Ledingham, I. McA., MacVicar, S., Watt, I. and Weston, G. A., 1982 "Early resuscitation after marathon collapse". *Lancet* 2 (8207): 1096-1097.
- Maughan, R. J., 1985 "Thermoregulation in marathon competition at low ambient temperature". *Int.J.Sports Med.* 6: 15-19.
- Maughan, R. J. and Leiper, J. B., 1983 "Aerobic capacity and fractional utilisation of aerobic capacity in elite and non-elite male and female marathon runners". *Eur.J.Appl.Physiol.* 52: 80-87.
- Nielsen, M., 1938 "Die Regulation der Korpertemperatur bei Muskularbeit". *Skand.Arch.Physiol.* 79: 193-230.
- Pugh, L. G. C. E., Corbett, J. L. and Johnson, R. B., 1967 "Rectal temperature, weight losses and sweat rates in marathon running". *J.Appl.Physiol.* 23: 347-352.
- Saltin, B. and Hermansen, L., 1966 "Oesophageal, rectal and muscle temperature during exercise". *J.Appl.Physiol.* 21: 1757-1762.
- Sutton, J. R., Coleman, M. J., Millar, A. P., Lazarus, L. and Russo, P., 1972 "The medical problems of mass participation in athletic competition". *Med.J.Aust.* 2: 127-133.

BOOK REVIEW

Title: PATIENT EXAMINATION AND ASSESSMENT FOR THERAPISTS
Authors: Margaret Hollis and Peter Yung
Publishers: Blackwell Scientific Publications
Price: £7.20 **130 pages with Index** **Soft cover**

In this pocket sized manual, Miss M. Hollis and Mr. P. Yung (the past and present Principals of Bradford School of Physiotherapy) have simply and clearly explained the procedures of patient examination and assessment.

Each chapter is headed by a delightful cartoon and caption, reminding the reader of the need to "consider the whole patient".

The purpose of the book is to remind every physiotherapist what, why, when, how and where he must look and question, to discover his patients' problems. The how to deal with them most effectively, so creating good relationships and establishing effective treatment regimes.

The chapters cover the philosophy, preparation and management of the patient and the basic and specific body area examination procedures. It reviews the simple but important tests and measurements which may be necessary and sums up normal and abnormal functional activities.

To some, this book might seem too simple, but I would like to recommend it strongly as a valuable addition to any Physiotherapy Department bookshelf.

Margaret John, MCSP, SRP