BOOK REVIEW

Biomechanics of the Musculo-skeletal System. Benno M. Nigg & Walter Herzog, eds, pp. 645, 1999. Price £60.00. ISBN 0-471-97818-3. John Wiley & Sons Limited, Chichester.

This book is intended for students and researchers in biomechanics. Chapter one contains a definition of biomechanics as "the science that examines forces acting upon and within a biological structure and effects produced by such forces". This chapter also includes a summary of basic principles in mechanics as related to the musculo-skeletal system. In Chapter two, biological materials such as morphology, histology and mechanics of bone, cartilage, ligament, tendon and muscle as they relate to biomechanics are discussed.

In Chapter three, measuring techniques with the different selected methods for quantifying biomechanical data experimentally are described. This chapter also includes a section on force measurements, accelerometry, measurement of motion with optical methods, electromyography and strain measurements. Methods for determining inertial parameters of the human and animal body are also discussed.

Finally, the fourth chapter is entitled "Modelling". So-called modelling is often used to understand and solve biomechanical problems. Many tasks are given to readers. For example: the possibility to calculate the magnitude and direction of forces in the hip joint of the supporting leg during running.

This book is welcomed for students in exercise and sports science, kinesiology and for all those with an interest in the biomechanical aspects of the human body.

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Stroke Units: An Evidence-based Approach, Peter Langhorne and Martin Dennis, eds., pp. 112, 1998. Price £25.00. BMJ Books, London.

In this study, the authors have shown that organized stroke care not only increases the likelihood of survival, but also the likelihood of avoiding subsequent institutionalization. Although the authors have written most of the chapters and taken editorial responsibility for the content and opinions expressed in the book, there are several additional contributions from the socalled "Stroke Unit Trialist's Collaboration Group", with 19 studies from different countries (four of them from Sweden).

The importance of the development of the Cochrane Database in England for evidence-based clinical studies can hardly be overemphasized. When the Minister of Health in London launched this database in 1995, the Cochrane review of stroke units was selected to illustrate the potential power of discoveries based on careful analyses of existing research evidence.

The study is comprised of seven chapters: "The stroke unit story", "How should we evaluate our interventions?", "Assembling evidence about stroke units", "Effectiveness of organized (stroke unit) care", "Economics of stroke unit care", "Implications for planning stroke services" and "Implications for future research".

The main focus of the book is the reporting of the collected scientific documentation about the stroke units. The book provides good information for all those who plan to organize new stroke units. The authors also show that the good effects do not depend on whether the units are organized in departments of Internal Medicine, Neurology or Geriatrics. It is also shown that the units with short inpatient care have less successful outcomes.

The book is recommended.

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