Nitric oxide in bone and joint disease. Edited by *M. V. J. Hukkanen, J. M. Polak and S. P. F. Hughes*. Pp 191. Cambridge: Cambridge University Press, 1998. ISBN: 0-521-59220-8. £50.00.

This book is part of Postgraduate Medical Science, a new series based on the successful and internationally well-regarded specialist training programme at the Imperial College School of Medicine, London, UK. This slim volume is divided into 17 chapters dealing with the effect of nitric oxide on bone and joint disease.

The opening chapter sets the scene with a brief overview of the biology of nitric oxide by Patrick Vallance and Salvador Moncada. There follows a series of chapters dealing with the effect on inflammatory arthritis, bone, the modulation of blood flow and, of particular relevance to orthopaedic surgeons, aseptic loosening of total hip prostheses. The text is clearly laid out with tables, figures and diagrams which are easy to understand.

Nitric oxide is undoubtedly one of the most important mediators in inflammation and bone metabolism. Therapies based on modulating nitric oxide will eventually be in clinical use. I would recommend this book to anyone interested in its practical aspects.

Gabriel Panayi.

The child with a limb deficiency. Edited by *John A. Herring and John G. Birch*. Pp 500. Rosemont, Illinois: American Academy of Orthopaedic Surgeons, 1998. ISBN: 0-89203-175-1. US\$25.00

This book provides an essentially North American view of the management of limb deficiency in children and there is no doubt that it fills a substantial void in the orthopaedic literature. Since the authors all met at a symposium as part of the preparation of this volume, the editors have been able to insert short and succinct 'consensus views' where controversy arises. Such an open-minded approach provides the reader with a sense of balance and a feeling for the direction in which the pendulum of opinion is swinging.

The highlight of the opening embryology section is a fascinating explanation of the hypothesis of the description sequence of the supply to the subclavian artery. Could the syndromes of Poland, Sprengle, Klippel-Feil and Möbius all share a similar aetiology of vascular occlusion, the precise syndrome produced depending on the site of vascular interruption? The fact that each of these syndromes may occur with some features of each other, seems to make the hypothesis likely.

Next and not surprisingly the problem of the classification of patterns of deformity is discussed. The term 'congenital deficiency of the femur' is to be preferred to 'proximal femoral focal deficiency'. While it is clear that the spectrum of congenital deformity can be split into ever more complex classifications, a strong plea is made for simpler and more useful classifications which are helpful in the treatment strategy. The Gillespie and Torode classification of congenital abnormalities of the femur is to be commended in this respect

The controversial van Nes rotationplasty, which has never been popular in the UK, is due for reconsideration particularly as the alternative to knee fusion and Syme's amputation when the ankle of the short leg lies at the level of the knee of the long leg. While the cosmetic appearance may seem grotesque to some, the functional result as judged by gait analysis and oxygen consumption shows advantages in favour of the Van Nes technique over the alternatives. Greater experience has allowed the procedure to be performed as early as the ages of two or three years and this leads to better acceptance by the patient. The problem of derotation of the leg with growth can be minimised by attention to surgical detail.

By contrast, Brown's fibulofemoral transfer for congenital absence of the complete tibia should probably be abandoned; it seldom works and the functional results of knee disarticulation are reasonably good. One author still felt that it has a place when there is an active quadriceps mechanism and the problem is bilateral.

There are competent sections on techniques of limb-lengthening, using either the Ilizarov or monolateral half-pin fixator methods. Particularly impressive in terms of lengthening are the results which may be achieved in severe fibular hemimelia, but it requires five or more sessions of treatment during the period of growth. Perhaps the impressive photographs do not state as much about function as one would wish to know. This does not sound like treatment for the faint-hearted.

In peacetime, traumatic limb amputations are much less common in our practice than the major congenital limb deficiencies. Nevertheless, it should be remembered that in other parts of the world this ratio is drastically reversed, particularly where modern warfare and landmines take their toll.

The upper limb is covered in slightly less detail but the problems here are different with the emphasis on preserving sensation and improving prehension. There are interesting contributions on limb salvage *versus* amputation for malignant tumours, stump capping for the prevention of spiky overgrowth that can compromise the tip of a stump and the lengthening of short residual limbs. Finally, there are up-to-date contributions on prosthetics and rehabilitation.

It is clear from this book that these patients do not just need specialist surgeons, they need specialist centres. I was delighted to see a contribution entitled 'training the child with lower limb loss to run'. Having achieved that some then go on to ski, which emphasises what can be done when these patients really move into top gear.

Andrew Jackson.

An atlas of foot and ankle surgery. Edited by *Nikolaus Wolker, Michael Stephens and Andrea Cracchiolo*. Pp 450. London: Martin Dunitz Publishers, 1998. ISBN: 1-85317-378-9. £149.50.

This is an excellent book, which can be used both as a 'how-to-do-it' technical manual for the trainee and as a reference text for the specialist foot and ankle surgeon. Each chapter is written by an eminent foot surgeon, with a flavour of worldwide collaboration.

The design of each chapter is methodical, with sensibly ordered sections on indications, contraindications, surgical technique, postoperative care and potential complications, followed by a strong

bibliography. The line drawings are accurate and easy to follow, with the surface markings for the skin incision being especially helpful. A wrongly sited skin incision can render an operation on the foot impossible or cause disastrous loss of a flap.

The sections on hallux valgus give a comprehensive management strategy for this common but highly variable condition. The value of the chapters on tendon transfers and compartment syndromes is particularly noteworthy, bringing clarity to these rather mystical aspects. Minor criticisms are that the chapter on acute repair of injuries to the lateral ligaments of the ankle is probably excessive, and that on the diabetic foot relies too heavily on ablative rather than reconstructive surgery. More should have been made of stabilisation/fusion of the neuropathic joint.

I would highly recommend this book to the orthopaedic senior trainee and consultant with an interest in the foot and ankle. It should be in every departmental library.

R. Lloyd Williams.

Pathophysiology and treatment of Paget's disease of the bone.

Second Edition. Edited by *John A. Kanis*. Pp 304. London: Martin Dunitz Publishers, 1998. ISBN: 1-85317-463-7. £75.00.

The first edition of this book in 1991 gained wide critical acclaim for its comprehensive coverage and for the clarity of its writing.

Its diagrams, full colour histopathology and radiological illustrations were all of high quality. This second edition has been occasioned by the rapid advances in bisphosphonate research over the intervening years. A new section is devoted to the therapeutic efficacy and mode of action of several compounds yet to gain product licences.

Paget's disease presents specific problems for orthopaedic surgery including pathological fractures, delayed union and angular deformity, difficulties in distinguishing between bone and joint pains due to the associated osteoarthritis, operative blood loss, and early implant failure.

The value of pretreatment is therefore of the utmost importance. It is stated on page 229 that calcitonin is still the preferred treatment for a rapid effect because bisphosphonates take months to reduce bone blood flow. This refers only to oral bisphosphonate therapy, however, and the author emphasises in a later section how rapid neurological symptoms may be reversed by giving bisphosphonates intravenously, although this route is only apparent after consulting the references. There is a misprint on page 229 which could result in dangerous overdosage of etidronate!

The author rightly leaves a question mark over the changing indications for bisphosphonate therapy, resulting from the ease with which prolonged remissions can now be gained. Further research is needed to answer the questions of preventive therapy in currently asymptomatic disease.

Lord Stamp.