homozygous protein C deficiency. However, a functional protein C (Acticlot, American Diagnostica) concentration of 5% (reference range day 0, 8.5–60%¹) made homozygous deficiency unlikely. Protein S and antithrombin III concentrations were normal.

Within 24 hours of the administration of 10 ml/kg of fresh frozen plasma there were visible improvements in the skin lesions and cerebral and renal function. By 7 days the infant had completely recovered. Fresh frozen plasma was given daily and then second daily until the 23rd day by which time the protein C concentration had risen to 35%. By 6 months the protein C concentration was within the adult range (55–186%).

Neurodevelopmental assessment at 9 months of age showed, a normal infant. The parental protein C concentrations were normal.

Protein C concentrations are known to be low in healthy neonates.¹ Therefore previous authors have advised caution in evaluating infants with apparent protein C deficiency.² The finding that purpura fulminans, previously only associated with homozygous deficiency, may also occur in transient protein C deficiency, further highlights the care that must be taken in evaluating infants with low protein C concentrations.

C MINUTILLO
P J PEMBERTON
M L N WILLOUGHBY
P J PRICE

Princess Margaret Hospital for Children,
GPO Box D184 Perth,
WA, Australia 6001

L R MARSHALL
Royal Perth Hospital

1 Bennhagen R, Holmberg L. Protein C activity and antigen in premature and fullterm newborn infants. *Acta Paediatr Scand* 1989;78: 34–9.

2 Manco-Johnson MJ, Marlar RA, Jacobson LJ, Hays T, Warady BA. Severe protein C deficiency in newborn infants. *J Pediatr* 1988;113: 359–63.

BOOK REVIEWS

Foetus into Man. By J M Tanner. (Pp 280; £6 paperback.) Castlemead Publications, 1989. ISBN 0-948555-24-6.

This is the second edition of an excellent book describing the journey of physical growth in terms that Professor Tanner hopes 'the biologically unsophisticated reader will understand and the biologically sophisticated approve'. They certainly will!

Human growth is described from conception through embryogenesis, fetal life, the transition at birth, infancy, and childhood to maturity at adolescence. The main outline and chapter contents closely follow those of the first edition but they have been all brought up to date, and some extensively rewritten. There is a valuable bibliography at the end of the book that contains for each chapter some key up to date references and suggestions for

further reading for those interested to pursue in greater depth the aspects covered.

Topics covered in 12 chapters include the features of the growth curve; the complex mosaic of differential growth and compositional changes of the body tissues and organs; and factors that regulate and organise growth. Influences on prenatal growth and subsequent size at birth; chromosomal and endocrine control of sexual dimorphism throughout childhood; and a masterly description of puberty with its endocrine regulation lucidly explained are also included. Other topics are the outcome of interactions between genetic make up and the environment, including a particularly well updated account of the effects of nutrition on growth and auxological characteristics of various races, and standards of normal growth with useful charts and figures for practical use in the clinic. Especially welcome is a section on what must be one of the most remarkable aspects of the growth process, 'catch up' growth. The book is rounded off with a succinct account of some common disorders of growth.

The text is written in Professor Tanner's well known inimitable and personal style that has little difficulty in attracting and maintaining the reader's attention. But the ease of this style should not be allowed to conceal the tremendous amount of factual information that is contained. The principal objective of the book is to describe human growth to such diverse audiences that might include teachers, practitioners, students, paramedical workers, and parents and I find it difficult to imagine how any of these groups will not derive benefit and enjoyment from the book. There is something in it for everyone, from the concerned parent of a short boy to the paediatrician dealing in the clinic setting with a difficult growth problem.

I will continue to recommend this book to my students as compulsory reading in their child health course and for those preparing for postgraduate diplomas. Were the many professional workers both in hospital and the community who are at some time involved in problems concerned with the physical growth of children to have this book on their shelves for immediate reference far fewer misconceptions and misunderstandings would arise. Unnecessary clinic referrals would decrease. A lot of parental anxiety would be removed, and the current eagerness for manipulating the growth curve of normal children would be less enthusiastically applied.

D P DAVIES
Professor of child health

Food Intolerance in Infancy. Edited by Robert N Hamburger. (Pp 317; \$47.50 hardback.) Raven Press, 1989. ISBN 0-88167-545-8.

I suspect that many British paediatricians have a sneaking mistrust of allergists. There is also a reluctance to ascribe every childhood symptom to food allergy. Although the diagnosis of cows' milk allergy has achieved widespread acceptance, there is an impression that food allergy has a certain social cachet and goes with other trappings of affluence. Although one would expect bona fide food allergy to be more common among the socially deprived, in practice it seems to be less prevalent among those who cannot afford expensive exclusion diets. The editor of this multiauthor book recognises this scepticism about food allergy in the introduction.

Throughout the book there is a well balanced approach avoiding statements about food allergy which are not supported by scientific data.

The book is essentially the edited proceedings of an international symposium on food intolerance and food allergy. The book consists of five sections and the first section deals with the immunological and chemical basis of food allergy. This is followed by sections on food allergy in general and the manifestations of cows' milk allergy in particular, which I found especially interesting. The chapters on the effects of cows' milk exclusion diets on sleep disturbance and colic were very thought provoking. However, I am still not sure that I will immediately advocate such a diet as the first line of treatment for children who are referred to me with behaviour problems. Dr Eastham's chapter provides a timely reminder of the possible disadvantages as well as potential benefits of soya protein formulas.

I found the section on the Carnation hypoallergenic formula the least interesting and least relevant part of the book. It was the only section of this otherwise excellent symposium to include the name of the sponsors and seemed to be the least objective scientifically. I remain to be convinced that the hypoallergenic formula is superior to protein hydrolysate formulas that are currently available. As Dr Hamburger himself pointed out 'just how hypoallergenic is the new formula?'

Overall I warmly welcome this book which will be of interest to general paediatricians, paediatric gastroenterologists, and immunologists. It should certainly find a place in every paediatric library and will also be of interest to some general practitioners and health visitors.

A W BOON
Consultant paediatrician

The Pediatric Spine III: Cysts, Tumors, and Infections. Edited by Antony Raimondi, Maurice Choux, Concezio Di Rocco. (Pp 215; DM 228 hardback.) Springer Verlag, 1989. ISBN 3-540-96804-0.

This small volume, the fourth in the ongoing series of publications entitled *Principles of Pediatric Neurosurgery*, concerns itself with certain aspects of the paediatric spine. The purpose of the series is to present the reader with an updated comprehensive view of selected topics in paediatric neurosurgery. The volumes are appearing at a greater frequency than one per year and rapid advances in a particular field, or a sense of previous neglect, dictate the choice of subject of each book. While there is a strong transatlantic presence among the contributors, the three principal editors are European and each volume is multiauthor. The series is written mainly for paediatric neurosurgeons and those training in the field, but both the current volume and the previous issues contain much of interest to the paediatric neurologist, oncologist, radiotherapist and neuroradiologist, as well as the general paediatrician and paediatric surgeon.

In the present issue, intraspinal tumours occupy at least 50% of the text, and the discussion is detailed and very practically orientated in terms of neuroradiological protocol, surgical approach, and radiotherapeutic considerations. Reproduction of imaging techniques (myelography, computed tomography, and magnetic resonance imaging) is first class