colonic polyps in their clinical practice. Pathologists and others interested in the development of cancer will be particularly pleased to have this book on their shelves.

R. B. McCONNELL

Human Malformations. British Medical Bulletin. Vol. 32, No. 1. Scientific editor C. L. Berry. (Pp. 98; illustrated. £3-00.) London: British Council. 1976.

Congenital malformations impose a heavy psychological burden on the family and an economic burden on society. In recent years their relative contribution to morbidity and mortality in childhood has increased dramatically as other causes have declined. However, as Professor McKeown points out in his thought-provoking introduction to this monograph, apart from one or two notable exceptions (e.g. rubella and thalidomide embryopathies) and despite several decades of research we still have little idea of their causation. Yet only when we have identified a specific causative agent may true prevention be really possible. Until then we shall have to rely on identifying those who are at risk of having affected children and then providing them with genetic counselling and antenatal diagnosis. This is by no means an entirely satisfactory solution and certainly selective abortion should only be considered a 'holding measure'. This volume is, therefore, particularly valuable because all the contributors address themselves to these various problems.

The genetics of congenital malformations (Carter) and developments in the antenatal diagnosis of chromosomal disorders (Laurence and Gregory) and CNS malformations (Brock) are well summarized, though one might hope that non-invasive techniques, such as sonography, might one day replace amniocentesis for the antenatal diagnosis of certain malformations (MacVicar). However, if, as one suspects, more investigators are now turning their attention to the possibility of *primary* prevention through an understanding of causation, then the remaining contributions are particularly relevant. Chapters on environmental teratogens (Smithells), drugs (Berry and Barlow), and infective agents (Dudgeon, Mims) are well documented accounts of our present knowledge in these fields. At present most investigators seem to favour an epidemiological approach to understanding aetiology from studying incidence figures in various population groups (Leck) and the development of surveillance systems (Weatherall and Haskey) whereby it is hoped that an 'epidemic' of a particular malformation might be recognized as soon as it occurs and that this is then more likely to lead to the identification of the causative agent. A hypothesis generated from data obtained from such epidemiological studies may then be tested either in the general population (e.g. to determine if the incidence declines with avoidance of a suspected teratogen) or on animal models. Alternatively, drugs and infective agents known to be teratogenic in animals may be given particular

consideration in studying the incidence of congenital malformations in man. Several contributors deal with the problems of animal models: the numerous models which are available (Beck), and ideas of pathogenesis which such models can produce (Poswillo, Wolpert). The possibility of mechanical factors operating *in utero* as a cause of congenital malformations is also discussed (Dunn).

It is a little disconcerting, however, that in only one instance so far has an epidemiological observation on a human congenital malformation ever led to any idea of a mechanism (Penrose's observation of two maternal age groups in Down's syndrome which ultimately proved to be related to two different chromosomal abnormalities). Further, that the two most clear-cut teratogenic agents so far identified in man (rubella and thalidomide) were recognized as such by astute physicians without recourse to statistics or laboratory studies. Nevertheless with the increasing attention which this field is now attracting, it seems more likely that epidemiological and animal studies may prove more helpful in the future in identifying causative agents and thus lead to prevention.

ALAN E. H. EMERY

Handbook of Hemophilia, Parts I and II. Edited by K. M. Brinkhous and H. C. Hemker. (Pp. xxxiv + 927 + Index; Figures + Tables. per 2-vol. set: U.S. \$135.50; Dfl. 325.00.) Amsterdam: Excerpta Medica; New York: American Elsevier. 1975.

The books successfully summarize the clinical aspects and the advances in understanding of the pathogenesis of haemophilia from recent and continuing research. As with most multi-author texts there is some overlap between chapters. This might have been avoided in some instances by condensing related chapters into a single chapter.

It is unfortunate that these books should be so expensive as this may prevent them being as widely and fully read as the authors had hoped. To reduce publishing costs the editors could perhaps have eliminated chapters which contribute little to the books, for example, 'Incidence of Haemophilia in South Africa' is condemned by its authors' opening sentence and the chapter on transplantation is superfluous when the site of procoagulant FVIII is unknown.

Although the chapters on specific blood products are of interest to the specialist, these chapters might have been better replaced by a chapter comparing the properties of different products. Among topics that might have benefited from further discussion is the detection of haemophilia carriers. In Chapter 30 it is unfortunate that the achievements of present therapy have been swamped by the discussion of the inadequacies.

Despite these criticisms, the book contains many useful chapters and readers wishing to pursue any subject further will find the comprehensive reference list invaluable.

F. G. H. HILL