percentages with different denominators and it was sometimes difficult to work out how many of each type of specimen had been examined. There is a useful composite table setting out developmental landmarks with reference to post-fertilization age so that contemporary events or appearances are easily picked out. A classification of placental villus morphology is defined and illustrated. The frequency of different morphologic types is depicted within each abnormal karyotype.

The next few chapters each concentrate on a particular karyotypic abnormality, monosomy X, triploidy, autosomal trisomy and tetraploidy. Although the number of specimens in each group is large (197 monosomy X, 176 triploidy) the number of specimens with an embryo or foetus is much smaller, 49 embryos and 9 foetuses with monosomy X and 115 embryos and 8 foetuses amongst triploid specimens.

There is discussion of different types of specimen, associated placental abnormalities and the relationship between types of specimen, gestational age and maternal age at the beginning of each chapter. The number and type of external abnormality at each stage is presented together with a brief account of visceral abnormalities. Each chapter is illustrated by a large number of high-quality photographs, mainly in colour. Many photographs illustrate the external appearance of embryo or embryo foetus or placental villi but some visceral abnormalities are illustrated in all chapters.

This book is a unique archive of a carefully conducted study. As an atlas it is clearly useful to its intended audience in its present form. I would have found it even more useful had the abnormal features in each section been presented in tabular form. I would have also liked to see some more of the study data such as reproductive history, drug ingestion, maternal illness, similarly presented perhaps as an appendix.

Does this book have any rivals? The most recently published book with which one might compare this is *Pathology of the Human Embryo and Pre-viable Fetus: an Atlas* from Kalousek, Fitch and Paradice, Springer-Verlag, New York, 1990. This book does not confine itself to the foetus with chromosome anomalies. There is a long section on normal development and malformations associated with a normal karyotype and effects of intrauterine infection are covered as well. Can one recommend one or the other? And to whom? The narrow range of Dr Warburton's Atlas with its in-depth coverage of its chosen field will clearly appeal to those interested in the effects of chromosome anomalies on development. For those with an applied interest in this subject, particularly those working in obstetrics, prenatal diagnosis, clinical genetics or foetal pathology, unless their departments have unlimited funds for book purchase, I think that the wider coverage presented by Kalousek is of more use in day-to-day practice, although I expect they would want to consult Warburton's Atlas from time to time.

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Introduction to Risk Calculation in Genetic Counselling. By IAN D. YOUNG. Oxford University Press. 1991. 160 pages. Hardback £22.50; paperback £12.50. ISBN 0 19 963263 4 and 0 19 963205 7.

Genetic counselling is a communication process which deals with the human problems associated with the occurrence, or the risk of occurrence, of a genetic disorder in a family. Patients are told about the severity and burden of the disorder and also about possible approaches to avoidance or prevention. Genetic counsellors thus need a number of skills; knowledge of genetics and of clinical diagnosis, ability to relate to their patients, and non-judgmental attitudes. Added to this must be the ability to calculate probabilities.

This little book is concerned with this particular aspect of genetic counselling and will be very useful for clinicians involved in working out risks. The author gives a number of examples of methods of calculation for diseases of different modes of inheritance with or without information from linked DNA markers. A particularly helpful chapter is that dealing with risks for individuals with balanced chromosomal rearrangements. This is an important aspect of genetic counselling and one which is often mishandled. Probably almost every situation where risk calculation would be required is dealt with in the book. Some of the calculations may be too detailed for the non-mathematically minded, but most clinicians will appreciate seeing how they are done.

The only possible deficiency in the book is the lack of information about computer programs such as MLINK which are now widely used for risk estimations from DNA data. Indeed it might be argued that any calculation of risk based on more than one linked marker is better handled by the computer than by the fallible human mind. Despite this reservation I would recommend this book to any clinicians involved in aspects of genetic counselling.

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Glossary of Genetics, Classical and Molecular, 5th edition. Edited by R. RIEGER, A. MICHAELIS and M. M. GREEN. Springer-Verlag, 1991. £24.50 soft cover. ISBN 3 540 52054 6.

This new *Glossary of Genetics* (*GG*, as I shall refer to it below), should obviously be compared with the very slightly older *DG* as I shall call the *Dictionary of Genetics* (edited by King and Stansfield, Oxford

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