human night vision as well as clinicians curious about the underlying physiology of visual function abnormalities.

F W FITZKE


The development of bifocal and multifocal intraocular lenses is a natural one but strangely has arrived on the intraocular lens scene late. This book reviews the conceptual development of multifocal lenses sometimes in a rather anecdotal way but includes the benefits derived from spectacle and contact lens multifocal styles. The design of the annular, bull's eye, and defraction grating type lenses is adequately covered and there is a passing reference to a split 'executive style' bifocal lens which would be more common in spectacle lenses.

The material overall is presented by an inspiring list of contributors. In the early chapters there are basic optics with much ray tracing and even wave front reconstruction to show how both retinal and defraction lead to the image on the retina. These techniques are used to produce focus spot diagrams calculated for single fixed objects in a series of image planes at different distances from the lens. Then the monofocal, bifocal, and multifocal intraocular lenses are derived. These spot diagrams are very revealing as to the quality of image that can be projected onto the retina from these various types of lenses and on the problems associated with them, such as tilt and decentration.

New optical and mathematical tools are brought to bear on the problem such as modern function in which the contrast is expressed as a fraction of object contrast and this function is plotted against line resolution, the resulting transfer function being of value to len designers and users alike. Some physical optics are used throughout the book.

All currently available types of multifocal lenses are discussed, including some not in very wide use such as the Nordan aspheric lens and the multifocal intraocular lens in which the entire refractive sequence is repeated in each of five relatively narrow zones. Zone plate lenses such as the 3M bifocal are discussed as are those familiar to readers who be the phase plate lenses. All of these types are related to their defraction limiting characteristics and the spot diagrams also form a measure of image transfer including aberration induced by off axis spots, tilt, and decentration.

The role of retinal imaging in processing and cleaning up the spurious parts of the spot diagrams is explored extensively and it is suggested that filtering of retinal noise by razing the blur and by inhibition and coincidence may provide a gating mechanism which improves retina to brain transfer. There are extensive, essential discussions of decentration and tilt of almost all the lens styles. There is the suggestion that multifocal and Array type lenses may avoid these problems.

While the book is generally a supportive thesis for multifocal lenses, there is some balance provided in chapter 18 where Steve Charles and Paul Runge suggest disadvantages in relation to examination of the retina and internal vitreoretinal procedures. They also indicate reduced visual function where the light and contrast losing possibilities of multifocal lenses may be accentuated by co-existing retinal or macular disease.

The later chapters relate to iatrogenic and preoperative astigmatic control and to arguments of capsular bag and sulcus placement. These are to some extent repetitive of material published elsewhere, especially in the Journal of Implant and Refractive Surgery. Much the same could be said of the chapter on A scan examination, although it is still worth reading.

In summary, this book is very useful for those who implant multifocal intraocular lenses. Others who choose not to may also find that it contains much theoretical information of value for all implant surgeons and for technicians involved in the support services for implantation.

C G F MUNTON


In response to the increasing demand for doctors to become involved in medical audit, the Centre for Medical Education in Dundee has produced a distance learning programme aimed at both hospital doctors and general practitioners. The package is based upon a reference book, clearly and concisely written, which explains what audit is and is not, the potential benefits to be derived from medical audit, and how to initiate an audit programme within one's workplace.

While the initial sections of the book are likely to be useful to those who are sceptical about the benefits of audit, or completely ignorant of the concept, those who have already embarked upon some form of audit exercise may find themselves very familiar with much of the material in the first four chapters. The remaining two thirds of the book covers technical niques used in taking samples of a population, how to collect, store, and handle data, and an elegantly straightforward section on basic statistical analysis. The level at which the book is pitched is probably right for most hospital doctors who must take responsibility for familiarising themselves with the audit process, but each chapter contains valuable guidance on further reading.

The other components of the package are sets of questions, both multiple choice and brief written exercises, which come in two versions: one for hospital doctors and the other for general practitioners. They are designed to be used in conjunction with the reference book to make the participants think critically about the way in which they can implement or improve on their use of audit in their own practice and encourage their involvement in initiating and implementing changes to these exercises can be forwarded to the Centre for Medical Education, Dundee and guidance is then given as to how the participants' answers compare with those of other doctors involved in the programme. New exercises are dispatched at regular intervals to maintain continuing interest.

This package appears to have been well designed and produced and should provide a very useful introduction to those wishing to become involved in medical audit. It should assist them in carrying out meaningful work while avoiding many potential pitfalls and errors and help to maintain their enthusiasm for continuing critical analysis of their working practices.

COLIN HUTCHINSON


This excellent little handbook is a mine of information.

It is designed basically for the beginner in ophthalmic antique collection, but is so full of hints and wrinkles that anyone starting to shop for old items, in any field, will derive benefit, and gain tips on how to set about commencing their collection.

What appears to be a simple topic is soon expanded by the author, as he narrates the width of subspecialties within the subject. Thus one’s fancy may be drawn towards spectacles or ophthalmic instruments at one end of the spectrum to eyebaths, books, and optical toys at the other.

The booklet ends with advice on the care and display of items, and there is a reference to museum collections worldwide, together with a list of market places and auction houses.

The author is to be congratulated on producing a stimulating, readable book, which will set the informed readers exploring their waste bins, and sallying forth into the highways and byways for hidden treasure of historic interest, and who knows, perhaps some value as well.

G Y CATFORD

Books received


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OBITUARY

T D V SWINSCOW DSC, MSG, MB, BS

Contributors to and readers of the British Journal of Ophthalmology will be sorry to hear of the death of Dr T D V Swinscow who was our technical editor from 1977 until 1991. Dr Swinscow was a scholar of some small physical stature and unassuming manner, possessed of great charm and a gentle wit, but an eagle eye for grammatical errors, unsubstantiated claims, faulty statistics, obfuscation, and humbug upon all of London, and any other irregularities which in his view rendered a paper less than fit for publication, he would pounce with firmness but unfailing