RESULTS

The composite standard resolves into four spots: the slowest is phenobarbitone, then a violet oval spot composed of butobarbitone and the slightly faster pentobarbitone, then a blue round spot of quinalbarbitone, and finally the fast hexobarbitone. Of the 10 commonly used barbiturates listed in the Table, three migrate at the rate of butobarbitone and three at the rate of pentobarbitone but in both groups a specific identification can be made by the appearance after acid treatment. Cyclobarbitone and heptabarbitone give distinctive slow blue spots after acid treatment, while pentobarbitone, quinalbarbitone, and hexobarbitone only just clear the halo of acid and appear as crescents at its upper margin.

The yellow colour produced by spraying allobarbitone, cyclobarbitone, heptabarbitone, quinalbarbitone, and hexobarbitone with 0.1% aqueous potassium permanganate may be useful for confirmation but helps little with primary identification except perhaps when a mixture of barbiturates is present.

TABLE

Official Name	Synonym	R _f Ratio ¹	R _f Ratio ¹ after Acid	Colour Reaction
Barbitone	Veronal	1.0	1.0	W V
Phenobarbitone	Luminal	1.0	1.0	W V
Butobarbitone	Soneryl	1.3	1.3	W V
Allobarbitone	Dial	1.3	Destroyed by acid treatment	— B
Cyclobarbitone	Phanodorm	1.3	0.2	— V
Pentobarbitone	Nembutal	1.4	0.1	W V
Amylobarbitone	Amytal	1.4	1.4	W V
Heptabarbitone	Medomin	1.4	0.2	W V
Quinalbarbitone	Seconal	1.6	0.1	W B
Hexobarbitone	Evipan	1.9	0.1	— V

¹Ratio of R_f of substituted barbiturate to that of barbitone

W = White after mercuric sulphate spray

V = Violet after diphenylcarbazone spray

B = Blue after diphenylcarbazone spray

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Book reviews

FLUORESCENCE MICROSCOPY IN THE CYTODIAGNOSIS OF CANCER. By G. Sani, U. Citti, G. Caramazza and P. Quinto. (Pp. xvi + 195; illustrated. \$27.50.) Springfield, Illinois: Charles C. Thomas. 1964.

This beautiful atlas of colour photographs shows the appearances in sections and in smears of normal and pathological cervical epithelium and endometrium, as seen with acridine orange fluorescence. This method has certain concrete advantages; it is rapid both in preparation and in examination of slides, and the results give such pleasure that the tedium of cytodiagnosis is reduced. But the wonderful colours are ephemeral, and this makes it unacceptable to many. Besides the gynaecological applications, further pictures are given of cells from other pathological sources, but these are treated only very briefly and might mislead. Chapters on the physical and chemical bases of fluorescence are given, as well as illustrated descriptions of the principal fluorescence microscopy sets on the market (but without fool-proof descriptions of how to use them). There is an extensive bibliography with titles.

ARTHUR SPRIGGS

EXFOLIATIVE CYTOLOGY IN GYNAECOLOGICAL PRACTICE. By Erica G. Wachtel. (Pp. xiii + 203; 188 figures. 45s.)

London: Butterworth & Co. (Publishers) Ltd. 1964.
 Dr. E. G. Wachtel writes with the authority of experience and draws a stimulating balance between the usefulness and limitations of cytological diagnosis.

There are numerous illustrative photomicrographs of excellent quality, and the book is an important yet a very readable British publication on the subject.

K. K. HUSSAIN

CLASSIFICATION OF BRAIN TUMOURS Edited by K. J. Zulch and A. L. Woolf. (Pp. x + 217; illustrated. 118s.) Vienna: Springer-Verlag. 1964.

This volume reports the papers and discussions which were heard at an international symposium in the summer of 1961. It is surprising that it has required almost three years to produce the report for there is little evidence of editing, either in the papers or the subsequent comments. One is forced to question if the verbatim reporting of discussions in this way is really worth while: the phrase 'thank you very much', for instance, appears on almost every discussion page, sometimes three or four times!

The symposium has as its objects to improve the classification of cerebral tumours and to clarify controversial problems. While it may have attained these objectives for the small group of participants, little clarification comes across to the reader.

Although workers particularly interested in cerebral tumours in their pathological, veterinary, and experi-