TABLE I

COMPARISON OF WHOLE BLOOD PLATELET COUNTS USING VARYING AMOUNTS OF BLOOD BY PROPOSED AND CENTRIFUGATION METHODS[1]

Whole Blood	*Saline (ml.)*	*Replicates*	*Mean Whole Blood Platelets (per c.mm.)*	*1 S.D.*	*Coefficient of Variation (%)*
20 c.mm.	2·5	10	207,440	6,900	3·3
40 c.mm.	2·5	10	212,730	8,500	4·0
0·1 ml.	2·5	10	219,730	5,000	2·3

[1]Mean of four replicate whole blood platelet counts on the same blood sample by the method of Eastham (1963) = 221,830 per c.mm. (Coefficient of variation of this method on 12 replicates = 5%.)

TABLE II

COMPARISON OF 20 ROUTINE WHOLE BLOOD PLATELET COUNTS BY CENTRIFUGATION AND PROPOSED SEDIMENTATION METHODS

Whole Blood Platelet Counts per c.mm.		*Percentage Difference from Centrifugation Method*
Centrifugation Method (Eastham, 1963)	*Proposed Simple Sedimentation Method*	
119,540	126,120	+ 5·5
176,220	159,130	− 9·7
181,160	163,250	− 9·9
189,780	192,940	+ 1·7
196,660	194,420	− 1·1
200,640	175,640	−12·5
203,620	209,100	+ 2·7
208,080	251,590	+20·9
211,060	197,670	− 6·3
213,560	217,210	+ 1·7
221,440	216,120	− 2·4
223,370	241,250	+ 8·0
229,250	213,530	− 6·9
235,060	222,670	− 5·3
243,110	225,750	− 8·4
248,900	239,350	− 3·8
253,960	234,060	− 7·8
269,130	257,030	− 4·5
295,120	282,810	− 3·8
436,440	392,610	−10·0

SUMMARY

A simple method for the separation of platelets from red cells without loss by sedimentation is described. The platelet-rich, red-cell-poor supernatant fluid is suitable for an accurate whole blood platelet count using an electronic particle counter. Only 20 c.mm. of blood is required for each count.

REFERENCES

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Estimation of true glucose in blood by the AutoAnalyser

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The introduction of the new tubular flow cell has enforced changes in AutoAnalyser methods. This, with the new 'C' membrane, now permits estimation of glucose by a glucose oxidase method at a rate of 60 samples per hour and with a sample volume of about 0·1 ml.

The reagents are those of Discombe (1963) with a reduction in the concentration of o-dianisidine from 500 mg. per litre to 200 mg. per litre. All reagents must be filtered.

The flow diagram is altered as in Figure 1.

The principal advantages are the use of a single dialysis, greater economy in reagents, greater speed, and smaller samples. The sensitivity is increased to about 23 transmission lines for a 100 mg.% standard.

REFERENCE

Discombe, G. (1963). *J. clin. Path.*, **16**, 170.

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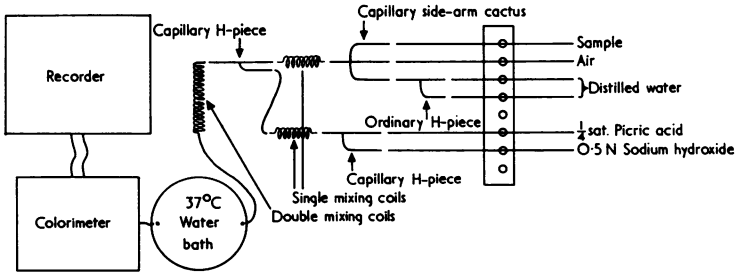

FIG. 1. *The flow diagram for the AutoAnalyser as used in the present method.*

CONTROL OF GLYCOGEN METABOLISM Ciba Foundation Symposium. Edited by W. J. Whelan and M. P. Cameron. (Pp. xiv + 434; 72 figures. 60*s*.) London: J. & A. Churchill Ltd. 1964.

Every publication of the Proceedings of Ciba Foundation Symposium has proved to be a book of exceptional value and importance. The latest example, concerned with glycogen metabolism, equals if not excels earlier volumes.

During the past decade or so an increasing number of basic biochemical studies on glycogen have been made and these taken together with investigations into and descriptions of glycogen storage disease undoubtedly necessitated the meeting held in July 1963 and organized by the Ciba Foundation. This body was able to gather together a group of internationally renowned workers as Professors Leloir, Cori, and Drs. B. Illingworth, Krebs, Whelan, Hers, and Larner to name only a few.

The group discussed in considerable detail almost all aspects relating to metabolic processes in which glycogen is concerned. In general there were three main aspects: basic processes, control of glycogen metabolism, and lastly glycogen storage diseases. A considerable portion of space is devoted to the many enzymes involved in degradation as well as in synthesis, both in the liver and in muscle. There are chapters on the physical and structural characteristics of glycogen, as well as to the effects of adrenaline on metabolism of this compound.

Dr. R. Schmid gives in a most excellent chapter a full description as well as a classification of the various glycogen storage disorders and each of the various types is discussed in detail in subsequent chapters. There is also included a paper given by Dr. Spencer-Peet on a deficiency disease involving a glycogen disorder.

Finally there is a general discussion, in part of which Dr. Whelan elaborates a scheme which illustrates the various enzymic processes involved in the build up as well as the degradation of glycogen.

The two editors are to be congratulated on the production of this most valuable and authoritative book on the subject. Clinicians and workers in biochemistry interested in disease and in the metabolism of glycogen will find this volume an absolute necessity, while detailed study of almost any one of its pages will be remarkably profitable.

JOHN N. CUMINGS

ABNORMALITIES OF THE SEX CHROMOSOME COMPLEMENT IN MAN By W. M. Court Brown, D. G. Hernden, P. A. Jacobs, N. Maclean and D. J. Mantle. (Pp. viii + 239; 3 figures. 27*s*. 6*d*.) London: H.M.S.O. 1964.

This special M.R.C. report is a catalogue of cases having an abnormal sex chromosome complement, collected by the Council's Clinical Effects of Radiation Research Unit in Edinburgh between 1959 and 1962. The discovery of sex chromatin and the advent of the cytogenetic era in man have made possible considerable advances in the understanding of abnormal sexual development. The catalogue is introduced by explanatory chapters on techniques for detection of sex chromatin and for chromosome analysis. One special point of interest is the subject of mosaicism which is dealt with very well: the use of a statistical approach in assessing the significance of the results of chromosome studies is advocated. The Unit is to be commended for assembling these carefully documented case histories and for making them available to other workers.

S. D. LAWLER

METABOLISM OF HUMAN GAMMA GLOBULIN (γ_{88}-globulin) By S. B. Andersen. (Pp. x + 139; 20 tables. 30*s*.) Oxford: Blackwell Scientific Publications. 1964.

Dr. Andersen deals critically with the means and implication of tracer techniques in measuring the metabolism of 17S γ-globulin. The book is furnished with liberal mathematical appendices which cover the major portion of the literature of the last year. It is clearly and simply written. The data on which the conclusions are based are laid out in detail. Chapters 4 and 5 are of particular interest in dealing with hypergammaglobulinaemic and hypogammaglobulinaemic states. It is interesting that the writer includes myelomatosis among the hypogammaglobulinaemic states on the grounds that the concentration of normal γ-globulin is decreased. In chapter 4 clear evidence is produced that in the majority of patients with cirrhosis of the liver gamma globulin synthesis is increased. Physicians as well as immunologists and biochemists will find this book interesting.

NICHOLAS MARTIN

CORRECTION

The following is the correct flow diagram for the note on 'Estimation of true glucose in blood by the Auto-Analyser' by Matthew Dick (*J. clin. Path.*, **18**, 249).