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TABLE V

RECOVERY OF MAGNESIUM ADDED TO A NORMAL SERUM

Magnesium Added (mg./100 ml.)	*Magnesium Found (mg./100 ml.)*	*Magnesium Recovered (mg./100 ml.)*	*% Recovery*
—	2·75	—	—
1·0	3·76	1·01	101·0
2·0	4·70	1·95	97·5
5·0	7·78	5·03	100·3
10·0	12·60	9·85	98·5
20·0	22·60	19·85	99·4

Mg/100 ml.) were added to a serum of known calcium content and after titration the recoveries were calculated.

Table V shows that the method gives satisfactory recoveries up to 20 mg. Mg/100 ml.

We wish to thank Professor N. F. Maclagan for his interest and help while these experiments were in progress.

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Dr. Corsellis should devote so much time and study to this problem. His book on this topic is of very great value to all those interested in this field. He has been able to collect 300 unselected cases from a mental hospital which have been studied and reviewed from the clinical, morbid anatomical, and histological aspects. This has entailed a very considerable detailed classification which he has tried successfully to keep to a minimum. Even so there are a very large number of carefully prepared tables of statistics from which it is possible to obtain practically all the necessary facts relating to his subject.

Clinically the mental hospital case material covers the organic brain conditions and the functional disorders while particular pathological features recorded consist of blood vessel changes, senile plaques, ventricular dilatation, and neurofibrillary changes, as well as including the causes of death.

Pathologists and clinicians, especially those concerned with geriatrics and with mental disorder, will be indebted to the author and this volume should remain as a permanent record which will be referred to in the future by all those concerned.

The volume is most excellently produced and such errors as were found are not worthy of recording.

J. N. CUMINGS

ELEVENTH ANNUAL COLLOQUIUM

The eleventh annual colloquium of the Sint Jans Hospital at Bruges (Belgium) on 'Protides of the biological fluids' will be held from 3 to 5 May 1963. For all information please apply to the Laboratory St. Jans Hospital, Bruges, Belgium.

Ninth International Congress of Haematology

NOMENCLATURE OF ABNORMAL HAEMOGLOBINS

At the Eighth International Congress of Haematology held in 1960 in Tokyo 12 recommendations on the nomenclature of abnormal haemoglobins were made. Because of the extremely rapid development in this field these recommendations were reviewed at the Ninth Congress in Mexico City in 1962. The present recommendations are to be further reviewed at the Tenth International Congress in Stockholm, 1964.

1 As published in this journal in 1960 the letters A through Q (except B) and S are recognized as naming the haemoglobins to which they were allotted. For the time being, the remaining letters of the alphabet should not be used for describing new haemoglobins which should now be named after localities. It should be left to the individual workers to choose the most meaningful name from the origin of the propositus, or the laboratory, hospital, town, or district where the haemoglobin was found. In the future the name of a locality or hospital should not be used twice, as for example it has been used for Hopkins I and Hopkins II, because this might confuse the naming of abnormal haemoglobin A_2 variants (see paragraph 5).

2 If a haemoglobin has been identified by the usual methods of electrophoresis, chromatography, spectroscopy, alkali denaturation, cold denaturation, and solubility tests, it should be described by the accepted capital letter. When comparison has been made on the same lines and with equal thoroughness with a haemoglobin carrying the name of a locality that name should be applied. If the abnormal polypeptide chain is identified this should be indicated by a subscript (for example, D_α, D_β); and until complete identification of the amino-acid sequence has been established this subscript should be followed by a declaration of origin ($D_{\beta\text{Los Angeles}}$, $G_{\alpha\text{Philadelphia}}$).

3 Analysis of amino-acid sequences of the globin molecule has now led to a precise chemical nomenclature elaborated by the 'Haemoglobin Structure Workshop,' Boston, December 1960.[1] This nomenclature is recommended to members of the International Society of Haematology, with the exception that the names of the known polypeptide chains of normal human haemoglobin should be α, β, γ, and δ, and not α^A, β^A, γ^F, and δA_2. However, in order to clarify a particular situation such as a hybridization experiment, the superscripts may be used.

4 In the nomenclature of haemoglobin M it has been customary to abbreviate descriptions such as $M_{\text{Saskatoon}}$ to M_S or M_{Boston} to M_B. This practice is now discouraged since with the rapidly increasing number of haemoglobins M any general abbreviation to initials becomes impracticable.

5 Of the different haemoglobins A_2 the δ-chain variants should not be named B_2, C_2, D_2, etc., as this would confuse the naming of haemoglobin A_2 variants with abnormal α- and normal δ chains. The designation

should remain A_2', A_2'', etc. This is a workable nomenclature for the time being, but should the number of δ-chain variants become too large a different designation may easily be devised on the same basis.

The α-chain variants of haemoglobin A_2 will remain designated by the name of the abnormal α-chain haemoglobin with which the abnormal haemoglobin A_2 is associated by the addition of a subscript '2', *i.e.*, G_2, I_2, $Norfolk_2$. This is the current usage, but it may become unwieldy if in the future one wanted to differentiate the haemoglobin A_2 variants of, for example, M_{Boston} and M_{Iwate}. It is proposed to discuss in 1964 the possible designation $A_2^{GPhiladelphia}$, A_2^{I}, $A_2^{Norfolk}$, A_2^{MIwate}.

6 The variants of haemoglobin F associated with γ-chain abnormalities are designed $F^{DSt.\ Louis}$, F^{I}, and hypothetically $F^{GPhiladelphia}$, $F^{Norfolk}$, etc.

7 The hybrid haemoglobins formed by abnormal α_2 and β_2 subunits should be designated by the names of the abnormal haemoglobins with which they share their abnormalities: $\alpha_2^I \beta_2^C = I/C$.

8 The expression β_4 for haemoglobin H and γ_4 for haemoglobin Barts may be used when they are felt to be appropriate.

9 The terms α- and β-thalassaemia may be used when they are felt to be appropriate.

10 The familial condition in which foetal haemoglobin persists into adult age without anaemia and without abnormal red cell morphology is for the present named 'hereditary persistence of high foetal haemoglobin'.

REFERENCE

[1]Gerald, P. S., and Ingram, V. M. (1961). *J. biol. Chem.*, **236**, 2155.

Broadsheets prepared by the Association of Clinical Pathologists

The following broadsheets (new series) are published by the Association of Clinical Pathologists. They may be obtained from **Dr. R. B. H. Tierney, Pathological Laboratory, Boutport Street, Barnstaple, N. Devon.** The prices include postage, but airmail will be charged extra.

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4 The Estimation of Carbon Monoxide in Blood. 1953. D. A. STANLEY. 1s.

5 The Identification of Reducing Substances in Urine by Partition Chromatography on Paper. 1953. G. B. MANNING. 1s.

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