ABSTRACTS

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HEMOSTASIS-PLATELETS

ESTIMATION OF THE COAGULATION FACTORS INVOLVED IN THE MAINTENANCE OF "PLASMA ATMOSPHERE" OF HUMAN PLATELETS. *Y. Bounameaux.* From the Clinique Médicale, University of Zürich. Rev.fr.Et. clin. et Biol., 2:52–63, 1957.

Human platelets hold, adsorbed onto their surface, several coagulation factors, which play a part in maintaining around the platelets the "plasma atmosphere," as it has been called by Roskam. Evidence is given for the presence of prothrombin and factors V, VII, VIII, IX and X in this "atmosphere." No antithrombin has been detected. These factors disappear progressively with repeated washings of the platelets. The importance of this "plasma atmosphere" of the platelets is discussed. Platelets washed by the usual methods cannot be considered completely free of plasma. Surface phenomena may play an important part in the physiological role of platelets.—*J. D.*

SEROTONIN CHANGES IN PLATELETS AND BRAIN INDUCED BY SMALL DAILY DOSES OF RESERPINE. *B. J. Haverbock, T. F. Dutcher, P. A. Shore, E. G. Tomich, L. L. Terry, and B. B. Brodie.* From the National Heart Institute, National Institutes of Health, Bethesda, Md. New England J. Med., 256:343-345, 1957.

In patients given Serpasil for periods of 10 days to 3 months, the serotonin content of the platelets was reduced to below measurable levels. Despite the absence of platelet serotonin, the patients all presented normal values for skin bleeding time, clot retraction, and vascular fragility. As expected, coagulation screening tests were unaffected. The authors conclude that serotonin has no demonstrable hemostatic function.—*T. H. S.*

MORPHOLOGIC AND BIOCHEMICAL STUDIES OF THE HUMAN BLOOD PLATELETS. *Hisao Morita and Toshio Asada.* From the Departments of Internal Medicine and Biochemistry, School of Medicine, Toho University, Tokyo, Japan.

The human blood platelets were successfully separated and studied systematically. Several types of transformed platelets suspended in various solutions such as plasma, saline solution, etc. were demonstrated by phasecontrast microscopy. The biochemical data obtained were as follows. a) Enzymatic distribution: the presence of acid monophosphatase, acid and alkaline pyrophosphatase, ATPase, esterase and a specific type of cholinesterase were demonstrated. Proteolytic enzyme was not recognized. Peroxydase was absent. Catalase was found to be insignificant. b) Energy metabolism: in addition to the data concerning respiratory activity, cytochrome system and glycolysis system, the

result of radioautographic study by paperchromatography was presented, where P^{32} was incorporated into ATP, ADP and other organic phosphatides. c) Component analysis: the calcium content was overwhelmingly great. DNA was not demonstrated, while RNA was present. Free and constitutional aminoacids were estimated by paper chromatography. and taurine was found remarkablely predominant. In some clinical cases of thrombocytopenia the increased destruction of platelets was suggested by quantitative determination of free taurine in urine. Some findings concerning the role of platelets in coagulation were presented and some critical points were discussed.—*K. M.*

THROMBOCYTOPENIC PURPURAS. *O. L. Gomez and H. Wuani.* From Hospital Vargas, Caracas, Venezuela. Rev. Policlinica Caracas. *24*:61-114, 1956.

In a review of the clinical and hematological data of 12 case, three were acute; two of these were associated, one with rubella and the other with infectious mononucleosis, while the third, idiopathic and fulminant was treated successfully with splenectomy. The other nine cases were of the chronic type.—*M. A. J.*

A CASE OF HAEMORRHAGIC THROMBOCYTHAEMIA. *M. K. Browne.* From Ballochmyle Hospital, Mauchline, Ayrshire, Scotland. Scot. Med. J. *1*:365-366, 1956.

A 49 year old woman developed bruises, thrombophlebitis in various situations, and hypochromic anemia. The platelet count rose to 1.6 million and there was an increase in megakarycytes in the marrow. The white count was not raised. Treatment was with heparin and phenylindanedione. The platelets rose to 2.1 million, and then fell to a normal level. Twelve months later the patient was seen again. There had been a further thrombotic episode, but no hematological relapse.—*R. H. G.*

STUDY OF TRANSFUSED PLATELETS IN A CASE OF CONGENITAL HYPOPLASTIC THOMBOCYTOPENIA. *A. D. Bell, J. W. Mold, R. A. M. Oliver, and S. Shaw.* From the Department of paediatrics and Clinical Pathology, Charing Cross Hospital, London, England. Brit. M. J. *2*:692–695, 1956.

A case report of congenital hypoplastic thrombocytopenia associated with other congenital defects. Platelet transfusions, cortisone, and splenectomy were used in treatment. Platelet transfusions consisted of blood which was collected so as to reduce to a minimum the loss of platelets. The survival of transfused platelets was estimated to be about four to five days. Post-mortem findings are reported.—*P. d. N.*

ISOANTIGENICITY OF HUMAN PLATELETS: Rh ANTIGENS. *P. Ruggieri.* From the Istituto di Clinica Medica Generale e Terapia Medica, University, Roma, Italy. Boll. Istit. Sieroterap. milanese *35*:196–201, 1956.

The presence of Rh antigens in human platelets was demonstrated by means of indirect Coombs reaction. The anti-Rh isoantibodies are specifically adsorbed by platelets and are obtainable from them by elution.—*P. d. N.*

HEMOSTASIS-VASCULAR LESIONS

HEREDITARY HAEMORRHAGIC TELANGIECTASIA WITH RETINAL AND CONJUNCTIVAL LESIONS. *J. Landau, E. Nelken and E. Davis.* From the Rotschild Hadassah University Hospital, Jerusalem, Israel. Lancet *2*:230-231, 1956.

Twenty-nine members of a family in four generations were examined, and hereditary hemorrhagic telangiectasia was found in eleven members. Seven of them had conjunctival telangiectases. Two members had varix-like ectatic formations in the retinal veins. Three

of them had cavernous naevi. In four members there were microcephalic idiocy and Little's disease. The ocular lesions were detected by the routine use of the slit-lamp.—*P. d. N.*

ACUTE SCHONLEIN-HENOCH PURPURA TREATED WITH PREDNISOLONE. REPORT OF A CASE. *A. S. Cohen.* From Dundee Royal Infirmary, Dundee, Angus, Scotland. Brit. M. J. *1*:143-144, 1957.

A 10 year old schoolgirl developed a purpuric eruption, rectal bleeding, abdominal pain, joint swellings, and hematuria. The platelet count was 851,000 per cu. mm. A diagnosis of anaphylactoid purpura was made, no etiological factor being known. There was no response to 550 mg. of cortisone given over seven days, but the administration of prednisolone, 40 mg. for three days, 30 mg. for two days, 25 mg. for four days, and 15 mg. thereafter for 11 days, was followed by recovery which was still maintained when the patient was seen five weeks later.—*R. H. G.*

IDIOPATHIC PULMONARY HEMOSIDEROSIS. *J. M. Irvin, P. N. Snowden,* Monroe, Wisconsin. J. Dis. Child *93*:182–188, 1957.

This paper deals with the report of a 16 year old white male suffering from idiopathic pulmonary hemosiderosis. The excellent clinical study of this patient, clearly reported, well defines this striking syndrome. A comprehensive review of the literature is included.

Of interest is the fact that this is the second reported instance of this disease being favorably influenced by adrenal cortical steriod therapy. The patient had remained clinically well for eight months following a 10-month course of contisone.—*N. J. S.*

AHG-DEFICIENCY IN A GIRL TREATED WITH ANTIHEMOPHILIC GLOBULIN. *I. M. Nilsson, B. Blombäck, M. Blombäck, and S. Svennerud.* From Allmänna sjukhuset, Malmø, and Karolinska institutet, Stockholm, Sweden. Nord. med. *56*:1654-1656, 1956.

(In Swedish with an English Summary.) A case of antihemophilic globulin deficiency combined with a prolonged bleeding time in a 17 year old girl is reported. Capillary microscopy was not performed. The findings reported suggest that it may be a case of "vascular hemophilia."—*M. S.*