cu. mm. Fasting resulted in a drop of 40 per cent in the eosinophils in 23 per cent of the individuals tested. Adrenal cortical extract produced no significant effects.

Adrenalin produced a 50 per cent decrease in eosinophils in only 14 of 25 individuals. This is at variance with results published by others.—*T.R.T.,Jr.*

A Note on the Effect of Pituitary Adrenocorticotropic Hormone (ACTH) and Cortisone in Ameliorating the Symptoms of Leukemia and of Cortisone in Hodgkin's Disease. *T. D. Spies, G. G. Lopez, F. Milanes, R. L. Toca, A. Reboredo and M. Aramburu.* From the Department of Nutrition and Metabolism, Northwestern University Medical School Studies in Nutrition at Hillman Hospital, Birmingham, Ala., and General Calixto Garcia Hospital, Havana, Cuba. South. M. J. *43:* 497-502, 1950.

The results obtained with either ACTH or cortisone therapy in 5 patients with acute lymphatic leukemia (4 children), 3 with chronic lymphatic leukemia and 1 with Hodgkin's disease are reported with case illustrations. Although only 1 of the group, a child with acute leukemia, failed to show any beneficial response whatsoever, the clinical improvement in the others was extremely variable in degree and duration and at best could be considered of only temporary nature. None of the patients exhibited a complete hematologic remission. The observations in these cases in general parallel those reported by other investigators.—*H.W.B.*

NEWS AND VIEWS

Foreign Newsletter - Turkey

E. Frank

To the Editor:

Turkey, particularly Anatolia, is a treasure-house for blood diseases. When in 1934 I began my work as professor of medicine here at the reformed University of Istanbul I thought myself a pretty well experienced hematologist but I soon discovered that a hematologist must practice geographical pathology, must study diseases on the spot, not only from descriptions in books.

One of the first facts that struck me was that at the clinic we often saw very severe anemias of the pernicious type which responded very well to liver extracts but had hydrochloric acid in normal or even abundant quantities in the gastric juice. Gradually we realized that the disease, now called nutritional macrocytic anemia in Anglo-Saxon countries, was widespread in Anatolia. At that time this disease was little known, and as the parts of the country were neither tropical nor subtropical, we thought at first it could not be identical with the tropical variety described by Lucy Wills in India. By now we know that without question these anemias here are the same disease; that tropical anemias, for the greater part, have nothing whatsoever to do with the tropics, but that they are caused by specific conditions and habits of nutrition of the natives and that these conditions in Turkey do not differ much from those in India or, according to Snapper's descriptions, in China.

During the last two years we have naturally been interested in how these anemias react to folic acid and vitamin B_{12}. Although opinions still differ widely, it can not even be considered a certainty that the so-called Wills factor really exists as distinct from the two antianemic principles. We have recently established that the statement that nutritional anemias have a megaloblastic bone marrow indistinguishable from that of real pernicious anemia needs to be corrected in two respects: (1) Though the bone marrow is megaloblastic, the proportional share of the nucleated red cells in the elements of the bone marrow does not surpass—as in pernicious anemia—greatly that of the white elements; on the contrary, it

often even remains behind the norm, and the whole bone marrow is hypoplastic. (2) There is a type of nutritional macrocytic anemia in which megaloblasts are lacking and macroblasts and pronormoblasts dominate. These cases certainly remind one of forms found by Snapper in China and described by Trowell in South Africa as so-called dimorphic anemias which, according to him, may be the result of a combined lack of antianemic principles and iron.

Vitamin B_{12} by itself is often not sufficient for megaloblastic forms. However the combination of this factor to folic acid and, best with the addition of iron, gives excellent results. It is more difficult to influence the macroblastic forms. Here, besides the two above mentioned principles, one should give large quantities of crude liver extracts, (10 to 15 cu. mm. Campolon daily) a preparation which Lucy Wills in her earlier examinations found very effective. As the base of the treatment, however, there must be a complete inversion of nutrition which hitherto consisted almost entirely of cereals, milk products and very small quantities of vegetables, but hardly any meat which is not eaten even by people who can afford it, as they prefer to sell their poultry, sheep and goats.

The two forms which we have distinguished in macrocytic anemias are found particularly clearly in the so-called pernicious anemias of pregnancy. Pregnancy is not the decisive factor but only an accentuating one. The bone marrow in these cases—in which, by the way, the color index is often only 1 or a little over—is sometimes macronormoblastic; very often it is difficult to decide whether one should call a single cell megaloblast or proerythroblast. To a certain extent we are able to confirm the statement, often made lately, that vitamin B_{12} is ineffective in pernicious anemia of pregnancy. Just at present we are watching a case in which the numbers of the red corpuscles and of the hemoglobin are slowly rising, but the megaloblasts do not disappear in the bone marrow and the peripheral blood remains highly hyperchromic.

Extraordinarily often one meets sprue in Anatolia. The differentiation between the tropical and the nontropical sprue has lost sense here. The megaloblastic bone marrow of sprue differs from that of the genuine pernicious anemia, as has already been noticed by others, in such a manner that the basophilic promegaloblasts recede whilst the orthochromatic ones prevail by far. As my pupil, Dr. Nedim Alca, has proved in his thesis, folic acid is the remedy by preference, and the lack of folic acid or folic acid conjugates in nutrition should etiologically play an important part. Folic acid is by far superior to the liver therapy, as it also makes diarrhea disappear and has a most favorable effect on the general condition of the often highly undernourished and almost cachectic patient, although fat absorption can only be improved to about 50 per cent.

Iron deficiency anemias are frequently seen in our clinic. These result sometimes from anchylostoma or necator, though by far the greater part are "essential" hypochromic anemias with achylia and koilonychia. F. Reimann, who has done pioneer work in this field in Middle Europe, studied the extension of these anemias in a rural district of Anatolia during a prolonged stay there and afterwards worked out the clinical picture with the help of the material in our clinic. His most outstanding conclusions are the following: In many districts the hypochromic anemia can be considered as endemic. It is found at any age. Particularly striking are the severe iron deficiency anemias amongst male and female children of 6 to 16 years. In later years women prevail by far. Iron deficiency may cause in addition to severe anemia, which is astoundingly well tolerated, tower skulls with mongoloid features, retarded growth, pigmentations of the skin and of the mucosa of the soft palate, lack of menses and insufficient development of primary and secondary sex characteristics. These cases, particularly if they show dilatation of the spongiosa and thinning of the compacta in the x-ray of the bones, remind one of thalassemia. They have in common with the latter a widened range of osmotic resistance of the erythrocytes, poikolocytosis of a high degree, also target cells. However, the differential diagnosis is not too difficult, as in thalassemia the alteration of the nails and the gastric achylia are missing and the serum iron percentage is high. Most remarkable is the effect of iron treatment which, as is well known, is absent in thalassemia. In these cases however it causes all symptoms to disappear and advances the growth and sexual development in particular.

It is most interesting that true chlorosis which no longer exists in Europe and in the

United States, is frequently found in girls of 15 to 20 years of age and is exactly as described by doctors about eighty years ago. As girls frequently marry very young, women show the symptoms of achylic chloroanemia ten years earlier than in Europe, that is to say between the twenty-fifth and thirty-fifth year. With young men one also notices severe iron deficiency anemias.

According to Reimann the reason for the frequency of iron deficiency anemias in all ages is the lack of iron inherent in the practically meatless diet, the breast feeding of infants for two or more years, the numerous intestinal infections in young children and the inadequate supply of iron with which the mothers provide their children. The latter fact is due to the mothers, in their turn, having inherited for generations an iron deficiency from their own mothers or female ancestors and that the women undergo numerous births without the loss of blood at the delivery being replaced by a suitable nourishment.

Hence anemia of the worst type can often be observed in young children and should it as yet not be strongly developed in them, it will become manifest during the period of puberty by the quick growth and the menstrual loss of blood. Special reasons for chlorosis in young girls (a specific inability to absorb iron) need not be adduced.

According to Reimann, the two factors which have most contributed to the disappearance of chlorosis in Europe are increased meat consumption and a decline in the birth rate in the last sixty years.

Other studies which are going on in our clinic concern the bone marrow in typhoid fever and in postmalarial hypersplenism. In the latter the bone marrow may be rich in cells, but there is either no development from metamyelocytes to segmented cells, or the segmented cells are retained in the bone marrow and are not delivered into the blood stream.

At present we are studying the question of thalassemia in Turkey. We have found all forms, from the classical Cooley's disease to the thalassemia minima, and we want to stress that the so-called heterozygotic thalassemia minor in adolescence is by no means always a slight anomaly, but may be a fairly serious illness.

Finally I would like to report that two of my collaborators, Drs. J. Franco and N. S. Arkun, are investigating, with the method of Fieschi and Astaldi, the effect of vitamin B_{12}, folic acid and folic acid antagonists on explanted megaloblasts. Up to now they have found that aminopterin intensifies the megaloblastic features of these cells, whereas folic acid induces an almost complete normalization. Vitamin B_{12} alone does not influence the explanted bone marrow megaloblasts. They are now trying to establish if vitamin B_{12} will act differently when added, together with folic acid, to the megaloblasts in vitro.

Dr. E. Frank

Program for the Third Congress of the European Society of Hematology in Rome from October 3 to 6, 1951.

Under the patronage of the Hematological Society of Italy, the congress of the European Society of Hematology will take place in Rome October 3 to 6, 1951.

Organization: 1. Those interested in participating in the Congress are requested to report in advance to Dr. M. Torrioli, Via Genova 24, Rome.

2. The congress-cards will be available in September from Dr. Torrioli, Rome. In the interest of necessary reservations the requests should be submitted as early as possible, whereby it should be noted whether I, II, or III hotel category is desired. Cost of congress-cards for members 15, non-members 20 Swiss francs. Exact information concerning hotel arrangements, remittance of money, etc. will follow later.

Provisional Program: Tuesday evening, October 2, 1951: Reception by the President of the Italian Hematological Society, Prof. G. Di Guglielmo, followed by a social gathering.

Wednesday morning, October 3, 1951: Opening of the official Congress by the President, Prof. P. Chevallier.

1. Main topic: Isotopes in Hematological Research and Therapy, John H. Lawrence, Donner Laboratory, Berkeley, California (Main Speaker). Isotopic Phosphorus in the Therapy of Polycythaemia, J. Waldenström, Medical Clinic, Malmö, Sweden. *Short lectures.* Wednesday afternoon and Thursday morning.

2. Main topic: New Histochemical and Physical Methods of Examination in Hematology.

(a) Histochemistry, W. Laves, Medical Clinic, Munich, Germany and E. Storti, Medical Clinic, Pavia, Italy. (b) Phase Contrast Microscopy, H. Lüdin, Medical Clinic, Basle, Switzerland. (c) Ultraviolet Adsorption Microscopy, B. Thorell, Nobel Institute, Stockholm, Sweden (Microspectrographical Methods in Hematology). (d) Electron Microscopy, M. Bessis, Centre de Transfusion, Paris, France.

Thursday afternoon.

3. Main topic: Reticulosis, Reticuloendotheliosis and Reticulosarcomatosis. (a) Pathological Anatomy of Reticulosis, Ahlström, Institute of Pathology, Lund, Sweden. (b) Reticulosis and Its Relationship to Sarcomatosis, Van der Meer and Zeldendrust, Institute of Pathology, Leiden, Holland. (c) Reactive Reticulosis, K. Rohr, Zurich, Swtizerland. (d) Clinic and Hematology of Malignant Reticulosis, Cazal, Montpellier, France.

Friday morning.

4. Main topic: ACTH and Cortisone in Hematology, J. H. Burchenal, Sloan Kettering Institute for Cancer Research, New York. (Announcement of other main lecturers will follow.)

Friday afternoon and Saturday morning: Special meeting of the Section on the Study of Coagulation.

First Theme: Anticoagulation Therapy, Jorpes, Stockholm, Sweden and F. Koller, Zurich, Switzerland.

Second Theme: Fibrinolysis, T. Astrup, Copenhagen, Denmark and Mac Farlane, Oxford, England.

Announcements for short lectures on the Section on the Study of Coagulation are to be addressed directly to Priv. Doz. Dr. F. Koller, Med. Univ. Klinik, Zurich, Switzerland.

Saturday afternoon and Sunday: Group excursion in buses of the vicinity of Rome by participants of the congress (Villa d'Este in Tivoli, etc.).

Friday evening: Official dinner and reception of the European Society of Hematology.

Women's Committee: A special committee will take care of the ladies during the scientific sessions and arrange receptions, excursions and sight-seeing tours.

Exhibitions and Practical Demonstrations: A relatively large exhibit will take place during the Congress which is especially directed to those who received no lecture time.

BOOK REVIEWS

La Talassemia (Morbo di Cooley e Forme Affini), *G. Astaldi, P. Tolentino and C. Sacchetti* (Preface by P. Introzzi and G. de Toni). Pavia, Tipografia del Libro, 1951, pp. 229.

This monograph on Cooley's anemia and related forms, now grouped under the heading of thalassanemia, seems to contain about everything known of these conditions. It is written in an easy and agreeable style which penetrates rapidly into the essential aspects of the numerous hematologic problems. It is well illustrated with 69 figures and 17 tables. The 13 chapters are grouped in two parts. The first deals with the genetic, anatomico-clinical and hematologic aspects of thalassanemia; the second part deals with the pathologic-physiology of erythropoiesis.

Although thalassanemia is an ancient desease, dating back to the paleolithic period in Sicily, it is only since Cooley called attention to this disease in 1925 that extensive investigations have been carried out. It is now recognized that there are three forms of thalassanemia, viz., the major, or Cooley's anemia; the minor, or Rietti-Greppi-Micheli disease; and the minima, or microcytemia of Silvestroni and Bianco. Genetically the first condition is homozygotic while the last two are heterozygotic. The major form is a fatal disease, the minor is compatible with life and the minima form is a hematologic condition without disability.