

of this long awaited and needed book. If the book receives the attention it deserves, misunderstanding regarding principles of blood group serology will be corrected, leading to greater understanding, insight, and advances in this growing field.

LESTER J. UNGER

WIENER, A. S.: *Rh-Hr Syllabus*. I tipi di sangue e le loro applicazioni. V. Idelson de Gnocchi & F., Napoli, 1956.

This is an Italian edition of the Rh-Hr Syllabus originally published in English in 1954. The author was fortunate to obtain the help of Prof. Mario Tortora in preparing this Italian edition.

The original contributions of A. S. Wiener to the field of blood grouping date back 30 years, so that he is one of the senior investigators in the field of blood grouping, and, in fact, a recognized leader. The author has played one of the leading roles in very many of the more important recent advances in the subject. With Karl Landsteiner he discovered the Rh factor, and then he described the Rh blocking antibody and blocking test, which led in turn to the realization that Rh antibodies as well as others can exist in two major molecular forms. The development of new techniques for demonstrating antibodies, namely, the conglutination, anti-globulin and proteolytic enzyme technique, led to the discovery of additional blood group antibodies. This book is concerned almost entirely with the complexities of the Rh-Hr types and their applications.

The author believes that for a thorough understanding of the complexities of the Rh-Hr types, a clear understanding of the difference between a blood factor and an agglutigen is essential. This concept was first advanced by Landsteiner and later crystallized and brought into focus by Wiener in his recent publications. This concept is clearly explained

in the Syllabus with the aid of diagrams. Mastery of this concept is essential for the understanding of more recent developments which have occurred since the publication of the Syllabus, notably, the discovery of a series of factors associated with the factor Rho, namely **Rh<sup>A</sup>** discovered by Wiener and Geiger, and **Rh<sup>B</sup>** and **Rh<sup>C</sup>** discovered by Unger and Wiener.

The information in the book is presented in the form of a series of definitions or explanations arranged by topic in logical order. There are chapters on fundamentals, explaining the nature of antibody specificity and chapters on Rh antibodies, serology and genetics of the Rh-Hr types, erythroblastosis fetalis, blood transfusion, autosenitization, anthropological and medicolegal applications. Especially to be recommended is the chapter on serology and genetics of the Rh-Hr types, which is based principally on original investigations of Wiener. Wiener's concept of the inheritance of Rh-Hr agglutinogens, each of which is characterized by multiple blood factors genetically transmitted as a block by multiple allelic genes, has found additional support in recent findings of Rosenfield and his collaborators (factors hr and rh<sub>1</sub>, as well as those of Unger and Wiener (factors **Rh<sup>A</sup>**, **Rh<sup>B</sup>**, and **Rh<sup>C</sup>**). Moreover, the principles are found to have general application to other blood group systems, notably, the M-N-S system, and in serological studies on blood groups of animals, notably, the B blood group system of cattle as worked out by Stormont and his collaborators.

The work of British investigators has not been neglected and an appendix has been devoted to the contributions of Fisher and Race, and the C-D-E notations proposed by them. This review of British work gives the reader Wiener's interpretation of the nature of their contributions.

It is evident that any worker in the field of blood grouping must be thoroughly familiar with the contents of this Syllabus. Unfortunately, the book contains no bibliography, but a good review of the literature on blood

grouping can be found in the author's previous text on the subject, Blood Groups and Transfusion, the third edition of which appeared in 1943.

LESTER J. UNGER

G. SANSONE, A. M. PIGA, G. SEGNI: *Il favismo*.  
Ed. Minerva Medica, 1958.

Gli AA., che appartengono alla Clinica pediatrica dell'Università di Genova, hanno realizzato, con questa bella pubblicazione, una cospicua messa a punto di un affascinante e ancora misterioso capitolo della patologia, che interessa, come scrive nella prefazione il Prof. De Toni, « non soltanto il medico internista e particolarmente il pediatra, ma anche l'ematologo, il tossicologo, l'allergologo, l'immunologo, il genetista ».

L'opera si divide in due parti.

Nella prima, dopo un capitolo dedicato alla storia del favismo, gli AA. ne descrivono la distribuzione geografica in Italia e nel mondo. Le regioni più colpite, in Italia, sono la Sicilia e soprattutto la Sardegna, ma la malattia compare in molte altre zone. Singolare è la coincidenza fra la distribuzione geografica del favismo e quella della microcitemia, ma essa sembra del tutto casuale.

Nei capitoli successivi, gli AA. trattano dell'eziopatogenesi, sintomatologia, diagnosi, de-

corso, terapia del favismo e descrivono ampiamente le varie prove di laboratorio indispensabili per lo studio della malattia.

Particolarmente interessante, in questa prima parte, il paragrafo dedicato alla eredo-familiarità del favismo, nel quale sono riportate le opinioni di tutti gli AA., che hanno dato una interpretazione genetica alla malattia.

Nella seconda parte, vengono pubblicati i protocolli relativi a 22 casi osservati personalmente dagli AA., presso la Clinica pediatrica di Genova, dove essi vennero ricoverati o visitati ambulatoriamente.

Gli AA. sono riusciti a mettere in evidenza, nei soggetti colpiti, notevoli alterazioni del sistema nervoso, denunciate dai tracciati e grafici, peraltro reversibili. Essi, inoltre, hanno riscontrato costantemente un disturbo del glutazione ridotto ed una turba enzimatica grave a carico della glucosio - 6P - deidrogenasi eritrocitaria. La stessa tara biochimica è stata riscontrata nei familiari apparentemente sani dei favici.

Secondo gli AA. è questo substrato biochimico che si eredita e che costituisce una conditio sine qua non per il manifestarsi della malattia, in seguito all'intervento di fattori immunitari specifici o enzimatici od ormonali o di altro genere.

La natura genotipica del favismo non si può negare, pur non essendo ancora del tutto chiarite le modalità di trasmissione.

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