
The frequent finding of dermatoglyphic abnormalities in chromosomal disorders has caused a renewed interest in the study of these characters which seem to be of considerable diagnostic importance and to give valuable information about early growth disturbances. The present monograph will be welcomed by all who are involved in these areas of research, especially since the author is a well-known expert in this field who has contributed so much to our present knowledge of the epidemiology and genetics of dermatoglyphics. Although our understanding of the genetic background is still incomplete, it has been fully established that the dermal configurations are genetically determined to a very great extent, and the collection and critical review of the vast number of studies of these characters will be of great value to the continued progress.

The introduction gives a comprehensice survey of the general features of ridge arrangements on fingers, toes, palms and soles, including the best methods of their description. The distribution of the characteristics in the general population is also given, based mainly on the author’s own investigations. The second section is devoted to the quantitative aspects which have proved so valuable in elucidating the genetics. The practical use of finger ridge counts in twin zygosity diagnosis is described in detail. The chapters dealing with the most important methods of quantifying palmar and plantar ridge patterns are of special value to those engaged in studies of chromosomal aberrations. The third section describes the characteristic findings in developmental abnormalities, due to single gene effects involving the limbs, and to anomalies of the chromosomal constitution. The results of the large number of studies in patients with autosomal trisomies and in their relatives are reviewed, and the abnormalities of dermal ridges seen in sex chromosomal aberrations are also discussed. Finally, the problem of the location of the responsible genes is considered; this has been attacked by so far unrewarding linkage analyses in sib pairs and by studies of patients with specific chromosomal abnormalities which have given some interesting suggestions.

This monograph is obviously indispensable for all geneticists and clinicians who use dermal ridges as a tool in their daily work, either as a descriptive measure in studies of populations, as a diagnostic aid in certain types of congenital abnormalities or as an indicator of early disturbances of foetal development.

M. Hauge, Copenhagen


The cytogenetics research group in Edinburgh with Dr. Court Brown as the leader made a substantial number of the discoveries leading to the enthusiasm for human cytogenetics in 1959 and the early sixties. Although this pioneer work created much of the fame of the group, it was soon realized by its members that largescale studies on homogenous samples of humans were
indispensable. In fact, the group was established in order to investigate the effects of ionising radiation, and chromo-

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some studies were selected as a tool for the study of delayed damage to the bone marrow by X-rays given as treatment to patients with spondylosing anchylitis. Other large-scale studies have followed: sex chromatin surveys of newborns and of mentally retarded patients, chromosome analysis on hundreds of normal individuals selected at random and, recently, the demonstration of the high frequency of XYY men among tall, aggressive, mentally deficient patients during a study of 200 inmates in certain state hospitals.

On the basis of this work Coult Brown gave a series of lectures in 1966 at the University of London. The aim was to stimulate interest in the application of human cytogenetics to population studies. From a medical point of view such studies are important as they furnish much of the basis on which the interpretation of chromosome observations in the individual should rest.

The book is unusually pleasant to read, written in a lucid style, giving surveys of important work and pointing towards the next step in human cytogenetics: the understanding of the abnormal meiosis in the process of evolution and of the load of balanced translocations carried by the healthy population.

The book is very well produced and beautifully printed.

A. Frøland, Copenhagen