RED BLOOD CELL AGGREGATION : FOREWORD

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Two years after the First International Symposium in Geneva, it was felt that the time had come to examine the present state of the art as regards the mechanisms and measurement of erythrocyte aggregation and the recent clinical contributions in this field. The influence of this micro rheological parameter has obviously, in the past, often been underestimated, although it plays a fundamental part in a great many pathological conditions.

In accordance with the first Symposium, we felt that it was essential that the Acts of the Symposium should be published without delay. This volume therefore contains the English version of the papers presented during the meeting. Although this Second Symposium - halfway between the 5th Symposium on Clinical Hemorheology in Bordeaux, June 1987 and the 7th International Congress of Biorheology in Nancy, June 1989 - can only provide a less than perfect picture of present-day knowledge on erythrocyte aggregation, it does, nevertheless, emphasize areas of recent progress achieved in understanding erythrocyte aggregation in the field of clinical hemorheology. Indeed, apart from the well-known disorders occurring in this parameter, which are observed during hematological diseases such as macroglobulinemia, a number of other diseases such as myocardial infarction, cardiovascular diseases, venous or arterial thrombosis, diabetes and Raynaud's syndrome also reveal an increase in red cell aggregation, which undoubtedly promotes changes in the distribution of blood in the microcirculatory system. However, further investigations are required to correlate clinical data with rheological observations, particularly as regards defining the influence of erythrocyte aggregation on local flow rates and on oxygen transport and release. Investigations on these aspects will, in the future, provide a more accurate definition of the effect of therapy or molecules that may possibly alter erythrocyte aggregation.

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