FIFTH INTERNATIONAL CONGRESS OF BIORHEOLOGY

SYMPOSIUM ON HEMORHEOLOGICAL DISORDERS IN CARDIOVASCULAR DISEASES

Introductory Remarks

B.E. Strauer

The idea for this symposium is based on the following questions and clinical experience:

(1) Are the cardiovascular diseases and rheological abnormalities which may exist parallel to each other and which may or must not influence themselves?

(2) Are there cardiovascular diseases which become manifest by the existence of rheological disorders, i.e. are the rheological abnormalities the reason for cardiovascular diseases?

The first point, i.e. the more co-existence of cardiovascular and of rheological disorders may be present for instance in low degree paraproteinemia, in polyglobulia and in hyperlipoproteinemia, whereas the second point, that is the etiologic connexion between rheological and cardiovascular diseases may play a role in severe hyperviscosity syndrome, as in severe paraproteinemia and hyperlipoproteinemia or in combined vasculitic and rheological abnormalities.

The aim of this symposium therefore is aimed to review and to discuss the following topics:

(1) The possible interaction between hemorheological disturbances and cardiovascular function,

(2) the analysis of disturbances in cardiovascular function as in
   - disseminated intravascular coagulation ("Verbrauchs-koagulopathie") and in systemic defibrination,
   - in hyperviscosity syndromes, as in paraproteinemia, hyperlipoproteinemia and severe polyglobulia,
   - in systemic and regional vasculitis, as in systemic immune complex vasculitis and in collagen diseases and
   - in vasculopathies of non-inflammatory origin.

The 3rd topic refers to diagnostic procedures for the evaluation of systemic and regional flow and rheological characteristics, especially in cardiovascular diseases, as in systemic peripheral arterial occlusive disease, in coronary artery disease with and without abnormal coronary arteriogram and in pulmonary diseases. The 4th topic finally includes the evaluation of therapeutical measures for improving regional and systemic blood flow, as plasmaphereses, cell separation, immune suppression, antihypertensive treatment and others.