Fibrinolysis – Thrombolysis

A.

Kappert

The first publication by Virchow on the decomposition of fibrin in the blood of dissected human bodies appeared in 1846. The term fibrinolysis was introduced in 1893 by Dastre who published observations on the dissolution of clotted dog's blood. Tillet and Garner discovered that streptococci cause a fibrinolytic activity of the blood, and they thereby introduced a new area. Between 1945 and 1949 the first papers were published which proved the existence of fibrinolysis activators. In 1949 Meneghini tried for the first time to use the increased fibrinolytic activity in human blood, induced by a fever shock, for the treatment of thrombo-embolic diseases.

In the last 15 years fibrinolysis has developed into an important branch of experimental and clinical medicine. Basic research has continually widened our knowledge of the composition and the function of the fibrinolytic system. It has also supplied the elements for a new specific field which opened novel and surprising avenues of approach in diagnostics and therapy for the clinician. The main purpose of all practical efforts is to find an effective treatment against the very important thrombo-embolic disorders whereby the dissolution of intravascular blood clots, i.e. thrombolysis, is the primary objective.

Fibrinolysis, in principle, is a reversal of blood coagulation. Haematologists and research workers in the field of blood coagulation were therefore the first to deal intensively with the appertaining questions. However, thrombotic and, vice versa, haemorrhagic incidents are also of great importance to the angiologist. Fundamental pathological problems of the blood vessels are connected with disorders in the fibrinolytic system, i.e. with a disturbance of the balance between blood coagulation and fibrinolysis. In angiology, the dissolution of intravascularly formed blood clots by therapeutic measures is an essential modern weapon in the fight against diseases of the blood vessels which have become increasingly significant.

It seemed justified, therefore, to publish in a special issue of ANGIOLOGICA a review on the present-day knowledge in the field of fibrinolysis-thrombolysis. All articles are written by well-known research workers and clinicians who have themselves contributed towards the remarkable developments in this special field and their efforts are herewith gratefully acknowledged.