Analysis of the Corrective Effect of Activated Prothrombin Complexes

M.		Kazama
T.		Abe

M. Kazama, Zenpukuji 4-chome, 26-4, Suginami-ku, Tokyo (Japan)

The haemostatic efficacy of activated prothrombin complex administered to haemophilia A patients has been reported by many investigators. In this paper, Feiba and Autoplex were analysed for their coagulation properties and corrective effect on prolonged A-PTT of factor VIII inhibitor plasma.

These preparations contained almost all coagulation factors. 144 Ou more of factor II and 198 μ more of factor X were contained per vial of Feiba than per vial of Autoplex. In Autoplex, the activity of factor VII was 288 Ou per vial, much higher than that in Feiba. Both preparations contained small amounts of other activated procoagulants.

Both preparations exhibited a corrective effect on A-PTT of factor VIII inhibitor plasma and a shortening effect on NA-PTT of normal plasma. The corrective effect of Autoplex, however, disappeared very shortly in these plasmas.

(3) The thrombin generation test revealed that more thrombin was generated in Feiba than in Autoplex. The thrombin generation of these preparations was slightly inhibited by AT-III but not by heparin and clearly inhibited in the presence of both.

(4) In the presence of factor VIII inhibitor of AT-III, the corrective effect of Feiba was well maintained in incubation, whereas that of Autoplex was rapidly decreased.

It was concluded that the active components showing corrective activity of these preparations are different from each other because the inhibitory effect of AT-III is apparently different.