90–95% clottability. It contained, in addition to fibrinogen, polymers and proteins of lower molecular weight. Most of the associated proteins were removed by adsorption of fibrinogen on DEAE-Cellulose followed by stepwise elution. Under these conditions fibrinogen was also separated into several fractions including high solubility fibrinogen, high molecular weight derivatives and a fibrinogen fraction which was associated with another protein. High solubility fibrinogen was investigated in more detail. Its plasmic digestion showed a lag phase which was not recognized, if normal fibrinogen was degraded. This indicates a relatively stable conformation of high solubility fibrinogen.

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R. von Hugo, R. Hafter, A. Stemberger and H. Graeff (I. Frauenklinik d. Universität, Maistraße 11, 8 München 2, and Max-Planck-Institut für Biochemie, 8033 Martinsried/b. München, Germany): **Soluble Fibrin Monomer Complexes Demonstrated by Agarose Gel Filtration and by Adsorption on Insolubilized Fibrinogen. A Comparative Study. (411)**

Incubation of fibrinogen with small amounts of thrombin resulted in the occurrence of soluble fibrin monomer complexes. These complexes consisted predominantly of a derivative with a higher molecular weight than that of fibrinogen. It was characterized by its relative electrophoretic mobility in 5% PAA gel (0.28×10^{-5} cm^2/V $\times$ sec) and its elution position prior to the fibrinogen peak following gel filtration. Using adsorption chromatography on insolubilized fibrinogen the derivative dissociated at a ratio of almost 1 : 1 into one part which was adsorbed and into fibrinogen which was not adsorbed. The part which was adsorbed seemed to be the thrombin mediated fibrin monomer. This study confirms the concept that dissociable dimeric fibrinogenfibrin monomer complexes occur after limited action of thrombin on fibrinogen.

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Y. Benabid, E. Concord and M. Suscillon (Centre d'Etudes Nucléaires, D. R. F., Hématologie, BP 85, 38041 – Grenoble, France): **Studies on Soluble Fibrin Complexes as a Function of pH. (412)**

Purified fibrinogen solutions, incubated with thrombin. CNBr. Sepharose, were subjected to agarose gel chromatography and eluted at different pH (6.5; 7.5; 8.5). Among high molecular weight derivatives formed by thrombin, the major component was a dimer. Gel chromatography at pH 8.5 showed a complexes peak distinct of that from fibrinogen, whereas at pH 6.5, only the fibrinogen peak appeared: fibrin monomer was eluted with fibrinogen as demonstrated by polyacrylamid gel electrophoresis 3.75% pH 8.9. SDS urea electrophoresis after reduction indicated that complexes peak contained two α-chains (α and α'). When fibrinogen was incubated with thrombin in the presence of FSF and calcium, several derivatives with higher and higher molecular weights were formed besides the dimer, and elution profiles of chromatography were identical at pH 6.5 and 8.5, thus indicating stable complexes formation. If fibrinogen-fibrin monomer mixture was subjected to FSF action at different pH, no complexes were formed at pH 6.5. These results confirm that at pH 6.5, any association was prevented.

F. Asbeck and J. van de Loo (Medizinische Universitätsklinik, D-5000 Köln 41, W.-Germany): **In Vitro Formation of Fibrin-Monomer Complexes in the Presence of Isotope Labelled Fibrinogen-Fibrin Degradation Products. An Agarose Gel Filtration Study. (413)**

Human citrated plasmas were mixed with purified ^{131}I-fibrinogen and ^{125}I-fibrinogen degradation products (FDP) or ^{125}I-fibrin degradation products (fdp). After incubation with small amounts of thrombin (0.01–0.02 units/ml Pl.), these mixtures were gel filtrated on Biogel A5m columns and the elution patterns of the ^{131}I- and ^{125}I-labelled materials were determined.

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