became necessary to study the "location" of GO-T in human platelets. Low GO-T activity was found in washings from separated platelets. On the other hand, high activity was found in a water soluble preparation from platelets after treatment with ether. Ether appeared to destroy the physical integrity of platelets while removing most of their lipoid constituents. Both findings, therefore, suggested that GO-T was an intimate constituent of platelets, presumably a part of the protein, water-soluble fraction.

It appears premature to discuss the significance of the finding of GO-T in platelets as well as the possible relationship of the enzyme to the role of platelets in the hemostatic mechanism.

Summary. 1) Platelets are a source of glutamic oxaloacetic transaminase in human blood. 2) The enzyme is an intimate constituent of platelets, being found principally in a water soluble fraction of platelets after separation of lipoids by ethyl ether.

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Amperometric Titration of -SH Groups in Purified Clotting Factors By Improved Method. (22276)

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In studies on specific reactive groups of proteins involved in the coagulation of blood, it was observed that compounds commonly used to alter –S–S– bonds caused inhibition of clotting activity of purified bovine prothrombin, whereas those used to alter –SH groups did not(1). No –SH groups were detected in purified prothrombin, thrombin or fibrinogen, nor during the conversion of prothrombin to thrombin. In these experiments, quantitative –SH measurements were made by the argentimetric amperometric method using an ethanol-ammoniacal titration mixture(1). Benesch, Lardy and Benesch(2) recently have emphasized that this method, as applied to protein –SH groups, is open to criticism on the grounds that the high pH of the NH_4OH-NH_4NO_3 buffer used may denature proteins and accelerate the oxidation rate of –SH groups, that the ammonium ions may effect total disappearance of some –SH groups, and that the alcohol, usually necessary to obtain sharp end points, also denatures proteins. It therefore was possible, although unlikely, that the absence of detectable –SH groups in the purified clotting products could be attributed to these factors.

In this same paper, Benesch *et al.* introduced a modification of the amperometric method which overcame these objections. Instead of ammonia as the agent to form the silver complex, they employed tris-(hydroxymethylaminomethane) which made it possible to titrate protein –SH groups in aqueous, buffered solutions at pH 7.4. Such solutions had the significant additional advantage of exerting no demonstrable drastic effects on proteins, thereby allowing the study of –SH groups of proteins in the native state and a more precise determination of the relative ac-