

Influence of glass and anticoagulant concentration on improvement of factor X deficiency tests

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Normal human blood received in 0.02 M sodium oxalate (1 part to 9 parts of blood) in 16 × 100 mm glass tubes, at 37 °C, always clotted. Blood from severe Factor X deficiency received in 0.02 M sodium oxalate did not clot. The prothrombin time of the 0.02 M oxalate Stuart plasma was much shorter than the prothrombin time of the 0.1 M oxalate Stuart plasma. The prothrombin time of the 0.1 M oxalate Stuart plasma was shorter with 0.02 M than with 0.01 M CaCl₂. The Stypven Time of this 0.1 M oxalate plasma was very prolonged but was almost normal with the 0.02 M oxalate plasma. Almost normal prothrombin time (with human brain thromboplastin) of a ten times concentrated 0.02 M oxalate Stuart plasma was observed. With 0.01 ml of a 1 % 0.02 M oxalate Stuart plasma for 0.1 ml of Factor VII deficient plasma the prothrombin time became normal. Same experiment with 0.1 M oxalate Stuart plasma did not normalize the prothrombin time. Very abnormal kaolin partial thromboplastin time for the 0.1 M ox