Sodium Oxalate as Anticoagulant

Honorato,

Rojas,

Ivanovic,

It is well known that 0.0025 M solution of sodium oxalate does not delay blood coagulation, even when in stoichiometric concentration with calcium. Three times more sodium oxalate than calcium present in blood is required to prevent blood coagulation (Quick). On the other hand the prothrombin time of oxalated human plasma is prolonged because destruction of the plasmatic cofactor of thromboplastin (P.C.T.) starts a few hours after storage. Quick believes that calcium protects this factor because hemophilic plasma from which calcium has not been removed does not alter its prothrombin time after 48 hours. These experiments do not explain satisfactorily why an excess of sodium oxalate is needed to render blood incoagulable and why oxalated stored plasma destroys by oxidation its cofactor of thromboplastin. We do not believe that the prothrombin time of oxalated human stored plasma is prolonged because calcium is eliminated. Another possibility must be considered. Sodium oxalate may have m