Title (en)

METHOD FOR DETERMINING THE STRUCTURAL PROFILE OF A FIBRIN CLOT REFLECTING THE STABILITY THEREOF, IN ORDER TO PREDICT THE RISK OF BLEEDING, THROMBOSIS OR RETHROMBOSIS

Title (de)

VERFAHREN ZUR BESTIMMUNG DES STRUKTURPROFILS EINES FIBRINGERINNSELS ALS AUSDRUCK DER STABILITÄT DAVON ZUR VORHERSAGE DES BLUTUNGSRISIKOS, EINER BLUTPLÄTTCHENTHROMBOSE ODER EINER RETHROMBOSE

Title (fr)

METHODE DE DETERMINATION DU PROFIL DE STRUCTURE D'UN CAILLOT DE FIBRINE REFLETANT SA STABILITE, POUR PREDIRE LE RISQUE DE SAIGNEMENT, DE THROMBOSE OU DE RE-THROMBOSE

Publication

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Application

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Abstract (en)

[origin: WO2016012729A1] The present invention relates to a method for dynamically determining the structural profile of a fibrin clot, reflecting the stability thereof in a biological sample of a patient, said method comprising the following steps: a) mixing the undiluted biological sample with tissue factor or a mixture of tissue factor and tissue plasminogen activator; b) incubating the mixture obtained in step a), then adding calcium ions to the mixture obtained, in order to initiate the formation of a fibrin clot; c) measuring the turbidity or the optical density of the clot being formed in step b), at at least two wavelengths of between 450 nm and 850 nm, and for a time of between 1 and 35 minutes; d) determining the structural profile of the analysed clot, expressed as a number of protofibrils, density and radius in c) by means of the formula $\tau.\lambda 5 = A\,[Fg].(\lambda 2 - B)$, wherein τ is the turbidity of the clot at a given wavelength λ, [Fg] is the initial weight concentration of fibrinogen, and A and B are coefficients which are proportional, respectively, to the density and the radius of the fibres that make up the clot; and e) comparing the obtained profile with a control. The method preferably includes a step f) that makes it possible to predict the risk of bleeding, thrombosis or rethrombosis and to select the anticoagulant that is best suited to the clinical situation of a patient.

IPC 8 full level

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Citation (search report)

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