von Willebrand Factor

Von Willebrand factor (vWF) is a blood glycoprotein involved in hemostasis.

It is a highly adhesive procoagulant molecule that mediates platelet adhesion to endothelial and subendothelial surfaces.

It is deficient or defective in von Willebrand disease and is involved in a large number of other diseases, including thrombotic thrombocytopenic purpura, Heyde's syndrome, and possibly hemolytic-uremic syndrome.

Increased plasma levels in a large number of cardiovascular, neoplastic, and connective tissue diseases are presumed to arise from adverse changes to the endothelium, and may contribute to an increased risk of thrombosis.

see von Willebrand Factor in glioma.

Increasing evidence suggests that the adhesive ligand von Willebrand factor (VWF), which is synthesized in and released from endothelial cells, plays a paradoxical role in both facilitating local hemostasis at the site of injury and also propagating TBI-induced endotheliopathy and coagulopathy systemically [1].

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Xu X, Kozar R, Zhang J, Dong JF. Diverse Activities of von Willebrand Factor in Traumatic Brain Injury and Associated Coagulopathy [published online ahead of print, 2020 Sep 15]. J Thromb Haemost. 2020;10.1111/jth.15096. doi:10.1111/jth.15096