Who we are

Majority owned by the NHS, but with the commercial freedom to invest in innovation, Viapath are on a mission to transform pathology services in the UK. We provide pathology services to the NHS, private hospitals and other organisations both across the country and internationally.

What we do

All our laboratories are either accredited or working towards accreditation by UKAS to ISO15189. To view our laboratory accreditation status please follow this link:

http://www.viapath.co.uk/about-viapath/quality-and-governance/accreditations

TEST OVERVIEW

Description
Type 2N VWD is characterised by markedly decreased binding affinity of VWF for FVIII. There is a disproportional decrease in FVIII relative to VWF:Ag. In the VWF:FVIII binding assay, patient VWF is captured by a VWF antibody bound to microtitre plate wells. Any FVIII that is bound to the VWF is removed with a high concentration of calcium chloride and exogenous recombinant FVIII is added to standardise the amount attempting to bind to test VWF. The VWF will capture FVIII relative to its FVIII binding capacity, the amount of binding being determined by addition of an enzyme-linked FVIII antibody that is reacted with a chromogenic substrate. The intensity of the coloured product of that reaction is directly proportional to the amount of FVIII bound to VWF.

Clinical details

von Willebrand factor (VWF) is a large adhesive glycoprotein synthesised in endothelial cells and megakaryocytes. Unlike the activated coagulation factors of secondary haemostasis it is not an enzyme and its functions involve binding to cells and molecules. Upon vessel injury, VWF binds directly to exposed sub-endothelial collagen and remains anchored. Blood flow unravels anchored VWF to expose the binding site for the constitutively expressed platelet surface receptor glycoprotein Ib. VWF captures and tethers platelets arriving at the scene which promotes subsequent events of primary haemostasis towards formation of a platelet plug. VWF also serves as the plasma carrier of FVIII to protect it from proteolytic degradation and also to ‘deliver’ it to sites of injury and clot formation. von Willebrand disease (VWD) is the most common hereditary bleeding disorder and the deficiency can be quantitative, involving reduced levels of normally functioning VWF, or qualitative, involving dysfunctional molecules. Laboratory investigation of VWD encompasses a battery of assays that assess different aspects of the molecule which inform sub-classification and clinical management: VWF:RCo assay measures glycoprotein Ib binding VWF:Ag assay measures total protein concentration irrespective of function VWF:CB assay measures collagen binding VWF:FVIII assay measures FVIII binding Multimer analysis investigates VWF structure FVIII activity is measured as levels can be reduced due to reduction of its carrier.

Related condition or disease
von Willebrand disease

Reference range
Interpretive reporting

Department
Haemostasis and Thrombosis Department

Laboratory
Diagnostic Haemostasis and Thrombosis Laboratory at St Thomas’

Location
Viapath at St Thomas’ Hospital

www.viapath.co.uk
020 7188 7188 (54109)
BusinessDevelopment@viapath.co.uk
VON WILLEBRAND FACTOR FVIII BINDING
(VWF:FVIIIB)

ORDERING INFORMATION

Sample type and Volume required
External requests: Citrated platelet poor plasma 500µL x 1 aliquot
Internal requests: please refer to EPR label

Turnaround time
Contact laboratory

Contacts
Diagnostic Haemostasis and Thrombosis Department
020 7188 2797
St Thomas’ Hospital
North Wing - 4th and 5th Floors
Westminster Bridge Road
London SE1 7EH

Laboratory opening times
24/7

How can we help?
We have a number of partnering options to suit your needs, whether you require this specific test or a range of services, we are here to help. Contact one of our friendly Business Development Managers for more information, or visit our website.

www.viapath.co.uk
020 7188 7188 (54109)
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