Elderly Female with a Personal and Family History of a Bleeding Disorder

Diana S. Desai,[1] Elaine Lyon,[1,3] George M. Rodgers,[1,2,3] Mohamed A. Jama,[3] Steven L. Wallentine,[4] and Kristi J. Smock[1,3]*

[1] Department of Pathology and [2] Department of Medicine, University of Utah Health Sciences Center, Salt Lake City, UT; [3] ARUP Laboratories Institute for Clinical and Experimental Pathology, Salt Lake City, UT; [4] Department of Hematology/Oncology, Central Utah Clinic, Provo, UT.

* ARUP Laboratories, 500 Chipeta Way, Mail-Stop 115-G04, Salt Lake City, UT 84108. Fax 801-585-3831; e-mail kristi.smock@aruplab.com.

CASE DESCRIPTION

A 77-year-old woman with a history of excessive bleeding and questionable diagnosis of von Willebrand disease (vWD) presented for a presurgical evaluation. Her daughter and grandson also had a history of a bleeding disorder. Bleeding events reported by the patient and her family members included easy bruising, postsurgical bleeding and hematoma formation requiring intervention with drainage and blood products, and excessive bleeding during childbirth. The physician requested testing for vWD to confirm the diagnosis and subtype, since subclassification of vWD guides appropriate therapy. Results of the initial testing revealed typical prothrombin time (PT) (13.7 s, reference interval 12.0 –15.5 s), typical activated partial thromboplastin time (aPTT) (31.5 s, reference interval 24–35 s), mild thrombocytopenia (116 K/μL, reference interval 150–450 K/μL), typical von Willebrand factor antigen (vWF:Ag) (108%, reference interval 52%–214%), typical factor VIII activity (98%, reference interval 56%–191%), decreased ristocetin cofactor activity (vWF:RCo) (19%, reference interval 51%–215%), and decreased vWF:RCo/vWF:Ag ratio (0.18, reference interval 0.7–1.0).

Questions to Consider
• Which laboratory tests are recommended in the initial evaluation of a patient with a history of bleeding disorders?
• What is the best interpretation of the initial results?
• What additional testing should be done to further clarify the diagnosis and determine optimal treatment?

Final Publication and Comments

The final published version with discussion and comments from the experts will appear in the July 2015 issue of *Clinical Chemistry*. To view the case and comments online, go to http://www.clinchem.org/content/vol61/issue7 and follow the link to the Clinical Case Study and Commentaries.

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Educational Centers

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