Prolonged Prothrombin Time After Discontinuing Vitamin K Antagonist

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CASE DESCRIPTION

A 65-year-old man was admitted to our hospital for a colonoscopy. He had been taking a vitamin K antagonist (acenocoumarol) since 1989, when he suffered from 2 episodes of lower limb deep vein thrombosis. Over time, his prothrombin time (PT)[4] international normalized ratio (INR) values were stable and checked regularly at an anticoagulation clinic. The anticoagulation clinic advised him to stop the intake of vitamin K antagonists 3 days before the colonoscopy. For patients undergoing a colonoscopy, a maximum INR of 1.7 on the day of the procedure is accepted. At our hospital, on the day of the scheduled colonoscopy procedure, our patient had an INR of 2.5. Based on this value, the colonoscopy was canceled and rescheduled. In addition to the INR, an activated partial thromboplastin time (APTT) was performed, which was greatly prolonged (>125 s).

The patient accepted the cancellation of the procedure but questioned his INR result of 2.5. Therefore, a few hours after visiting our hospital, he had the values checked again at his anticoagulation clinic, which resulted in an INR of 1.2. Puzzled, he phoned the clinical laboratory of the hospital and asked to speak with the clinical chemist for an explanation of these inconsistent results.

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QUESTIONS TO CONSIDER
• What are possible causes of a PT-INR that differs between laboratories?
• Considering the medical history of the patient, what diagnosis does the prolonged APTT suggest?
• What additional testing should be done to confirm the diagnosis in this patient?

Final Publication and Comments

The final published version with discussion and comments from the experts will appear in the September 2017 issue of *Clinical Chemistry*. To view the case and comments online, go to http://www.clinchem.org/content/vol63/issue9 and follow the link to the Clinical Case Study and Commentaries.

Educational Centers

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