Difficulty of establishing preoperative coagulation status

Editor—We read with interest the editorial proposing that the routine measurement of a patient’s coagulation status should be abandoned in the absence of a family or personal history, an acute illness, or anticoagulation therapy.1 The authors are correct that questioning the patient about clotting abnormalities and bleeding disorders should form an essential part of the pre-anaesthetic medical assessment. However, it is possible that patients themselves may be unaware that there is an issue to report. Some years previously, a young man presented for major cancer surgery, having previously undergone a staging laparoscopy, followed by chemotherapy. He was then seen by a consultant at a pre-operative anaesthetic clinic, after a surgical assessment. As was normal practice at the time, a routine coagulation sample had been analysed along with the other routine investigations. The activated partial thromboplastin time (APTT) was found to be prolonged, at 1.29 (normal maximum 1.18), although platelet count and international normalized ratio were normal. Initially, this was thought to be a spurious finding, but examination of past records revealed that after the laparoscopy, and before the chemotherapy, a postoperative set of blood tests had included a clotting screen, which showed the APT to be 1.33. By chance, the patient’s parents had also attended the pre-operative anaesthetic appointment to support him. Initially, full questioning revealed no evidence of any personal or family history of clotting abnormality. However, the evidence of the prolonged APPT prompted a detailed inter-familial discussion. It was then revealed that as a child, the patient had suffered excessive bleeding after a minor procedure, and he then admitted to bleeding freely after minor trauma, such as shaving cuts. In addition, it was also revealed that the patient’s female siblings had received blood transfusions after surgery of moderate severity and that a maternal sibling had also experienced bleeding difficulties. Soon, the classic autosomal dominant pattern of a previously unrecognized von Willebrand’s clotting abnormality was revealed. Discussion with the haematologist led to the operation being postponed for a short time so that surgery could proceed with adequate haematological cover. The diagnosis of von Willebrand’s was confirmed, and the operation was successful, and uneventful. Although in many cases the performance of coagulation tests may be redundant due to the variation in normal findings, and the rarity of finding a meaningful abnormality, reliance on a carefully elicited history as a screening tool to prompt investigation of a possible disorder may be unreliable. The correct use of routine preoperative clotting tests situation is compounded by the non-specificity of NICE guidance in some situations.2 As the above story reveals, even with appropriate questioning, no history may be forthcoming in the first instance as the patient may be unaware that they have a problem, or unaware of disease patterns within the extended family. This is not just the case with von Willebrand’s, but also with other clotting disorders such as Factor XI deficiency, and Factor VII disorders.3, 4 In this case, it was only the presence of the abnormal blood test and the fortuitous attendance of parents that prompted the family reflection that revealed the pattern of disease. Although von Willebrand’s disease is a common coagulation disorder in humans, the family were unaware until that point they had a genetically associated coagulation problem, despite a series of incidents. In this case, preoperative coagulation testing prevented a potential disaster. Although anaesthetists should ensure that they do their best to ask patients specifically about bleeding disorders, using this as a screening tool to determine whether preoperative clotting tests is unreliable. The promotion of greater awareness of blood disorders in the general public may be the most effective answer.

Conflict of interest

None declared.

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Reply from the authors

Editor—We thank Drs Watts and Joseph for their letter regarding preoperative coagulation status in response to our Editorial.1 They describe the case of a young man requiring major surgery who was unaware of a personal and family history of bleeding but which was discovered after a prolonged activated partial thromboplastin time (APTT) that triggered detailed history taking from family members, leading to a diagnosis of von Willebrand disease (VWD). The authors suggest that a ‘potential disaster’ was avoided by routine testing and that reliance on a bleeding history as a screening tool may be unreliable. We note that the patient had undergone staging laparoscopy uneventfully prior to any APTTs being performed, suggesting that the bleeding disorder here was mild. Although we agree that there is currently no method for fully establishing the bleeding risk in the perioperative period, their letter also highlights