Author's reply

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Dear Sir,

In the original study on isolated thrombocytopenia in childhood,[1] pseudothrombocytopenia was not included. Two cases of pseudothrombocytopenia were detailed in a prior publication.[2] That said, Sriwijitalai and Wiwanitkit's comments[3] are important, as they are about pre-analytical, technical issues rather than genuine pathology. Although the mechanism is not fully understood, the occurrence of pseudothrombocytopenia is most likely a multifactorial phenomenon in which pre-existing autoantibodies are allowed to agglutinate platelets *in vitro* during sample storage, in a time-, temperature-, anticoagulant- and disease-dependent process.[4] However, the condition can be readily identified by examination of the blood film (Fig. 1a). Switching to an alternative anticoagulant for sample collection, as suggested by Sriwijitalai and Wiwanitkit,[3] is one way of resolving the spurious results. However, in our experience, beating the time factor with a new sample and running the test immediately is equally efficacious. This simple method has recently been proposed as the first manoeuvre when dealing with pseudothrombocytopenia.[4]

We recently encountered a four-month-old boy whose automated full blood count showed isolated thrombocytopenia of 17×10^9/L with no clinical signs of bleeding. Examination of the blood film revealed a striking absence of normal platelets on the whole film, while the remaining platelets appeared degranulated and scattered in small clumps (Fig. 1b). A suspicion was raised that the blood sample had been manipulated. The phlebotomist later admitted that a blood clot had been manually removed from the ethylenediaminetetraacetic acid container before the sample was dispatched to the laboratory.

Keeping up laboratory quality can be challenging, but the importance of a carefully examined peripheral blood film cannot be overemphasised, whether the thrombocytopenia is spurious or genuine.

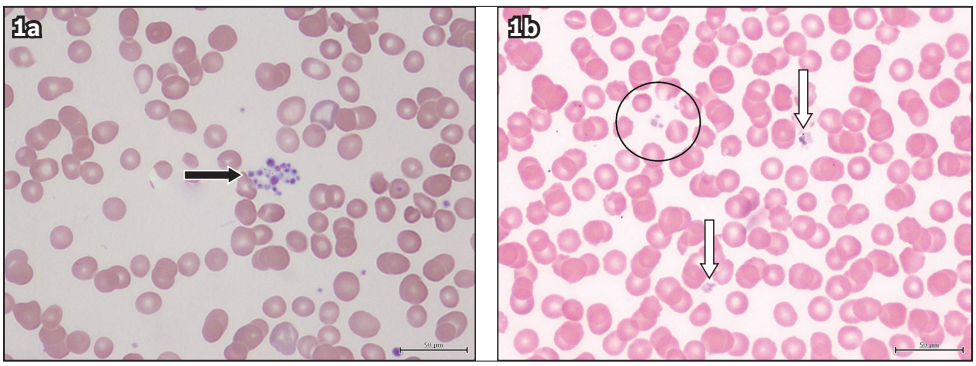

Fig. 1 Photomicrographs of peripheral blood films show (a) typical platelet clumping (black arrow) in a case of pseudothrombocytopenia, probably due to exposure to ethylenediaminetetraacetic acid anticoagulant during storage; and (b) degranulated platelets (white arrows) with some appearing as small clumps (circled) in a four-month-old child (Wright's, × 100).

Yours sincerely,

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References

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