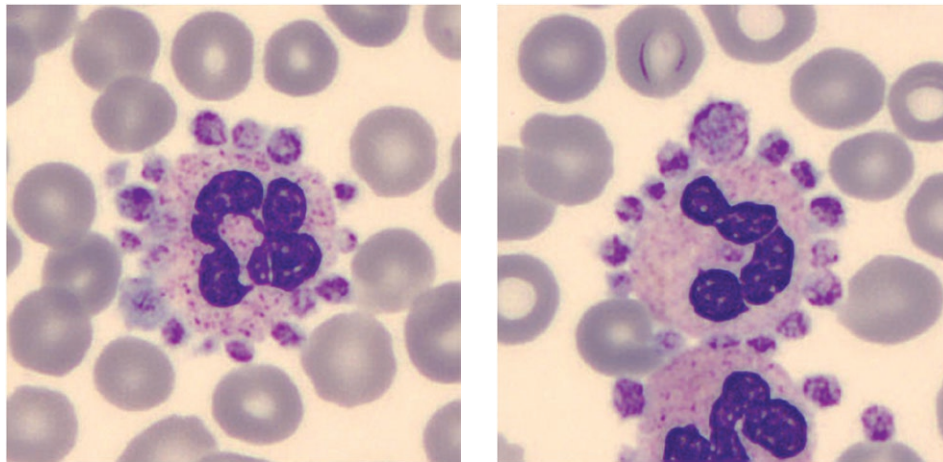


## Platelet satellitism

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Figures 1 & 2 – Peripheral blood smear presenting numerous platelets adhered to mature granulocytes consistent with platelet satellitism

Platelet satellitism is an *in vitro* phenomenon involving platelet rosetting around mature granulocytes that is observed exclusively in edetic acid (EDTA)-treated peripheral blood at room temperature<sup>(1)</sup>. The precise underlying mechanism of platelet satellitism remains to be fully elucidated but the current explanations include an immunologic mechanism, characterized by EDTA-dependent binding of serum IgG antibodies to both the platelet glycoprotein IIb/IIIa complex and neutrophil Fcγ-receptors<sup>(2)</sup>; and a non-immunologic adherence mediated by thrombospondin or another alpha-granule protein<sup>(3)</sup>.

The main clinical significance of this event lies in false low automated platelet counts (pseudothrombocytopenia) and highlights the importance of peripheral blood smear analysis in patients with thrombocytopenia. The collection of a new blood sample in the S-Monovette ThromboExact tube (Sarsted, Germany) or alternatively in citrate or heparin can solve this issue.

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