de amostras de 30 doadores de sangue saudáveis (15 homens e 15 mulheres). As amostras foram processadas no coagulômetro CS2500 (Sysmex), com o reagente ACTIN FSL® (Siemens). Foram excluídas amostras com condições hereditárias/adquiridas interferentes na coagulação. Os dados foram processados e avaliados estatisticamente. **Discussão e Conclusão:** Dos 3393 pacientes, 6,51% (221) apresentaram TTPa com a razão TTPa < 0.95, São pacientes aparentemente saudáveis com tendência à hipercoagulabilidade. Esses dados reforçam a evidência de que valores baixos de TTPa podem estar associados a um estado pró-coagulante. A não exclusão por idade, sexo ou outros fatores pode representar uma limitação do estudo, porém também confere aplicabilidade prática ao resultado como triagem populacional. Foi observada uma prevalência de 6,51% de pacientes com TTPa abaixo da razão de 0.95, sem causas conhecidas de alteração da hemostasia. Esses dados sugerem que o TTPa, pela sua simplicidade e baixo custo, pode ser considerado no futuro como um marcador auxiliar de risco tromboembólico, em associação com outros fatores clínicos.

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PURINERGIC SIGNALING PATHWAYS AS A MECHANISM OF PLATELET ACTIVATION IN ANTIPHOSPHOLIPID SYNDROME

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Introduction: Platelets from patients with Antiphospholipid Syndrome (APS) are known to exhibit hyperreactivity to ADP, increased P2Y12 expression, and reduced intracellular cAMP and cGMP, suggesting enhanced purinergic signaling. The mechanisms underlying this increased platelet activation remain unclear. Since adenosine regulates platelet inhibition through elevation of cAMP via A2A and A2B receptors, impaired adenosine signaling could contribute to hypercoagulability in APS. Recent findings from our group indicate that Platelets from thrombotic Primary APS (t-PAPS) demonstrate resistance to adenosine-mediated inhibition. **Objectives:** To assess whether IgG purified from t-PAPS patients modulates platelet activation and responsiveness to adenosine. **Material and methods:** A case–control study was conducted at the Hematology and Hemotherapy Center, University of Campinas (Hemocentro-UNICAMP; Ethics approval CAAE: 70399223.0.0000.5404). Washed platelets from healthy donors were incubated either alone (n = 23), with patient- or control-derived IgG, or with purinergic agonists – adenosine or NECA (1 or 10 μM) – and stimulated with ADP (10 μM) (n=14) as appropriate. Platelet activation was assessed via flow cytometry using dual labeling for CD62P (P-selectin) and PAC-1 (activated GPIIb/IIIa) expression. The percentage of double-positive platelets was used as the activation parameter, and inhibition was expressed as the relative decrease in activation in the presence of adenosine or NECA. Statistical analyses included Friedman tests with Dunn's post hoc correction and unpaired t-tests. **Results:** Under basal conditions, incubation with IgG from controls led to a rise in dual-positive platelets compared with baseline [6.9%, IQR 4.2–12.0 vs. 4.0%, IQR 3.5 –5.2; p = 0.009], while IgG from t-PAPS patients further enhanced this response, reaching higher levels [8.6%, IQR 5.3 –13.9 vs. baseline; p < 0.0001]. Furthermore, when compared IgG P vs IgG C, IgG from t-PAPS activated more platelets (double-positive for P-selectin and PAC-1) than IgG from controls (p = 0.03; Friedman with Dunn's post hoc). Upon stimulation with ADP (10 μM), preincubation with IgG P potentiated dual-positive expression compared to ADP alone [19.1%, IQR 10.0 –33.4 vs. 7.5%, IQR 5.0–14.5; p<0.0001], whereas IgG C induced a response comparable to ADP alone [14.7%, IQR 5.6–25.1 vs. 7.5%, IQR 5.0–14.5; p = 0.11]. IgG C and IgG P, both under ADP 10 μM stimulation, exhibited similar dual-positive expression (p = 0.11). However, IgG P and IgG C showed comparable inhibitory effects. For adenosine 1 μM, inhibition was 31.5 ± 21.9% with IgG P and 31.2 ± 22.4% with IgG C (p = 0.98, unpaired t-test). At 10 μM, IgG P inhibited 38.9 ± 20.8% and IgG C inhibited 39.8 ± 20.9% (p = 0.94). With NECA, inhibition remained comparable: at 1 μM, IgG P inhibited 41.2 ± 20.5% and IgG C inhibited 34.8 ± 25.2% (p = 0.63), and at 10 μM, IgG P inhibited 49.4 ± 16.4% and IgG C inhibited 36.9 ± 27.1% (p = 0.28), indicating that patient-derived IgG did not affect adenosine-mediated inhibition of platelet activation. **Discussion and Conclusion:** IgG from t-PAPS patients enhance platelet activation in healthy donors, especially under ADP stimulation, but does not impair adenosine-mediated inhibition of platelet activation. These findings suggest that pathways beyond IgG-mediated modulation may be responsible for the adenosine resistance in t-PAPS platelets. Targeting adenosine signaling may represent a potential therapeutic avenue to mitigate platelet hyperreactivity in APS.

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