

file of T80/A10 single-pill combination was comparable to that of its respective components.

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**Sleep Disordered Breathing in Children is Associated with Increased Platelet Aggregation, Systemic Inflammation and Endothelial Dysfunction**

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**Introduction:** Sleep disordered breathing (SDB) in adults is an independent risk factor for coronary artery disease and stroke. Altered platelet reactivity, endothelial dysfunction and inflammation in adults with SDB are known to contribute to the pathogenesis of its cardiovascular complications. Sleep disordered breathing also occurs in children; however little is known about these parameters in non-obese children with SDB. Therefore, this study investigated platelet aggregation, inflammation and endothelial function in children with SDB and healthy matched controls.

**Methods:** Clinical evaluation of SDB was performed on 19 children aged 5–16 years through polysomnography ( $n=12$  were clinically diagnosed with SDB,  $n=7$  were controls). Venous blood samples were collected and analysed for measurements of platelet aggregation and inflammation. Platelet aggregation was assessed by the Multiplate analyzer. Inflammation was assessed by intracellular cytokine analysis of T cell by flow cytometry. Plasma asymmetric dimethylarginine (ADMA), a marker of endothelial function, was also quantified.

**Results:** Platelet aggregation was significantly increased in SDB subjects compared to controls ( $56.7 \pm 16.8$  aggregation units (AU) vs.  $38.3 \pm 4.0$  AU,  $p < 0.05$ ). There was a significant increase in inflammation measured by T-cell interferon (IFN)-gamma (SDB  $52 \pm 4\%$  vs controls  $25 \pm 3\%$  positive cells,  $P < 0.005$ ) and tumour necrosis factor (TNF)-alpha (SDB  $39 \pm 4\%$  vs controls  $20 \pm 2\%$  positive cells,  $P < 0.005$ ) in SDB children compared with controls. Children with SDB also exhibited higher ADMA levels ( $0.43 \pm 0.5$  vs controls  $0.35 \pm 0.08$   $\mu\text{mol/l}$ ,  $p < 0.05$ ).

**Conclusion:** Sleep disordered breathing in children is associated with enhanced platelet aggregation, endothelial dysfunction and inflammatory responses. These parameters may contribute to an increased cardiovascular risk for children with SDB.

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This abstract has been withdrawn

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**The Number and Function of Late Outgrowth Endothelial Cells Correlate with the extent of Coronary Artery Disease**

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**The Number and Function of Late Outgrowth Endothelial Cells Correlate with the Extent of Coronary Collateralisation in Humans**

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**The Spatio-temporal Distribution of Migrating Pericytes in a Rat Model of Stroke: The Expression of Definitive Cell Markers**

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In ischaemic brain and myocardium, activated cells play an important role in reperfusion, control of blood flow, reduction of reactive oxygen species and angiogenesis. In the spontaneous hypertensive rat (SHR) stroke model, generated by temporary occlusion of the middle cerebral artery, the spatio-temporal distribution of putative migrating pericytes (smooth muscle actin-positive,  $\alpha\text{SMA}^+$ ), with additional markers to confirm cell identity, was investigated in the peri-infarct region. The distribution of  $\alpha\text{SMA}^+$  cells was established using a standard immunohistochem-