Therapeutic Potentials of Sarpogrelate in Cardiovascular Disease*

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ABSTRACT

In view of the pivotal role of serotonin (5-HT) in a wide variety of cardiovascular disorders, extensive effort has been made to develop different types of 5-HT receptor antagonists for therapeutic use. On the basis of experimental studies, this article is focused on the potentials of sarpogrelate, a specific 5-HT₂A receptor antagonist as an antiplatelet, anti-thrombotic, antiatherosclerotic and antianginal agent. The major effects of sarpogrelate are due to the inhibition of 5-HT-induced platelet aggregation and smooth muscle cell proliferation. This agent was found to attenuate the 5-HT-mediated increase in intracellular Ca²⁺ and ischemia-reperfusion injury in the heart. Sarpogrelate has been found to have beneficial effects in peripheral vascular disease, restenosis after coronary stenting, pulmonary hypertension, acute and chronic myocardial infarction.

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