Gene implicated in stress-induced high blood pressure

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Do stressful situations make your blood pressure rise? If so, your phosducin gene could be to blame according to a team of researchers, at the University of Freiburg, Germany, and the Medical College of Wisconsin, Milwaukee, that has identified a role for the protein generated by the phosducin gene in modulating blood pressure in response to stress in both mice and humans.

The team, led by Lutz Hein and Ulrich Broeckel, generated mice lacking phosducin and found that they had increased baseline blood pressure when compared with normal mice and that they showed enhanced increases in blood pressure in response to post-operative stress. Analysis in humans indicated that a number of phosducin gene variants were associated with certain stress-dependent blood pressure responses. Further, one gene variant in particular was associated with elevated baseline blood pressure.

These data led the authors to suggest that phosducin might be a good target for drugs designed to alleviate stress-induced high blood pressure. In an accompanying commentary, however, Guido Grassi, at Clinica Medica, Italy, notes that further studies are needed before the therapeutic implications of these data can really be determined.

More information: Phosducin influences sympathetic activity and prevents stress-induced hypertension in humans and mice. View this article at: www.jci.org/articles/view/3843 … ch6PLgvm06ENhpLnhy41

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