

## **Sinoaortic Denervation Differentially Reverses Iliac, Renal and Mesenteric Vasoconstriction Evoked by Stimulation of A<sub>1</sub> Adenosine Receptors in the Nucleus of the Solitary Tract (NTS)**

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Activation of NTS A<sub>1</sub> adenosine receptors evokes transient vasodilation followed by differential neural and vasopressinergic vasoconstriction in the iliac, mesenteric and renal vascular beds (*FASEB*, 21: A466, 2007). These responses may be partially mediated via inhibition of NTS baroreflex mechanisms (*Am J Physiol* 294: H172-82, 2008). Therefore, in the present study we assessed the contribution of baroreflex mechanism to the regional vascular responses evoked by stimulation of NTS A<sub>1</sub> adenosine receptors (CPA 330pmol/50nl) in urethane/chloralose anesthetized male Sprague Dawley rats. We compared the responses in iliac, mesenteric and renal vascular conductance evoked in intact vs. sinoaortic denervated (SAD) animals. SAD abolished vasoconstriction and accentuated vasodilation (iliac $\geq$ mesenteric $>$ renal). Inasmuch as NTS A<sub>1</sub> adenosine receptor mediated activation of the adrenal medulla partially persisted after SAD plus vagotomy or blockade of glutamatergic transmission in the NTS (*Am J Physiol* 283: H1588-99, 2002) we conclude that the differential regional vasodilation observed in SAD animals is mediated mostly via non-baroreflex activation of the adrenal medulla. NIH HL-67814

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