



Fig. S4. CBF increases associated with transient hypotension under isoflurane anesthesia

A control SHR was surgically prepared as described in the text, and cortical CBF was monitored by speckle contrast perfusion imaging at a region ~ 2 mm lateral to bregma. Mean arterial blood pressure (BP) was measured via a tail artery cannula. Spontaneous cycles of increased CBF observed under isoflurane anesthesia were associated with transient hypotension, indicative of generalized vasodilation. Comparable correlations were observed under halothane anesthesia, in which CBF oscillations were similar in magnitude but more frequent, and associated blood pressure changes were smaller (not shown). Flow increases could also be elicited in response to elevated blood pressure, as seen during the manipulation in preparation for α -chloralose infusion (asterisk). Transition to α -chloralose markedly decreased CBF and eliminated oscillations, usually associated with a slight increase in blood pressure.