

SUPPLEMENTAL FIGURES

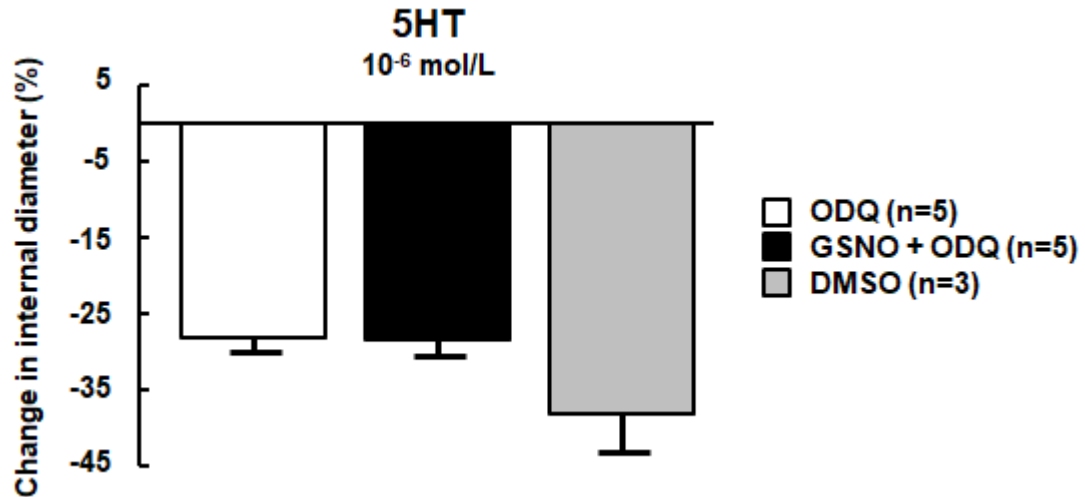


Fig. I *Ex vivo* exposure to GSNO decreases AngII-mediated vasoconstriction independently of the order of administration of the drugs.

Vasoconstriction (% change in internal diameter) in response to angiotensin II (AngII, 10⁻¹⁰ mol.L⁻¹, open bars) and serotonin (5HT, 3.10⁻⁹ mol.L⁻¹, full bars) in middle cerebral arteries of Wistar rats that were unexposed (panel A, n=7) or exposed (panel B, n=9; panel C, n=2) to S-nitrosoglutathione (GSNO, 2.10⁻⁶ mol.L⁻¹, 30 min followed by 1 hour washout). In contrast with panels A and B, in panel C 5HT was applied before AngII. Results are shown as means ± sem.

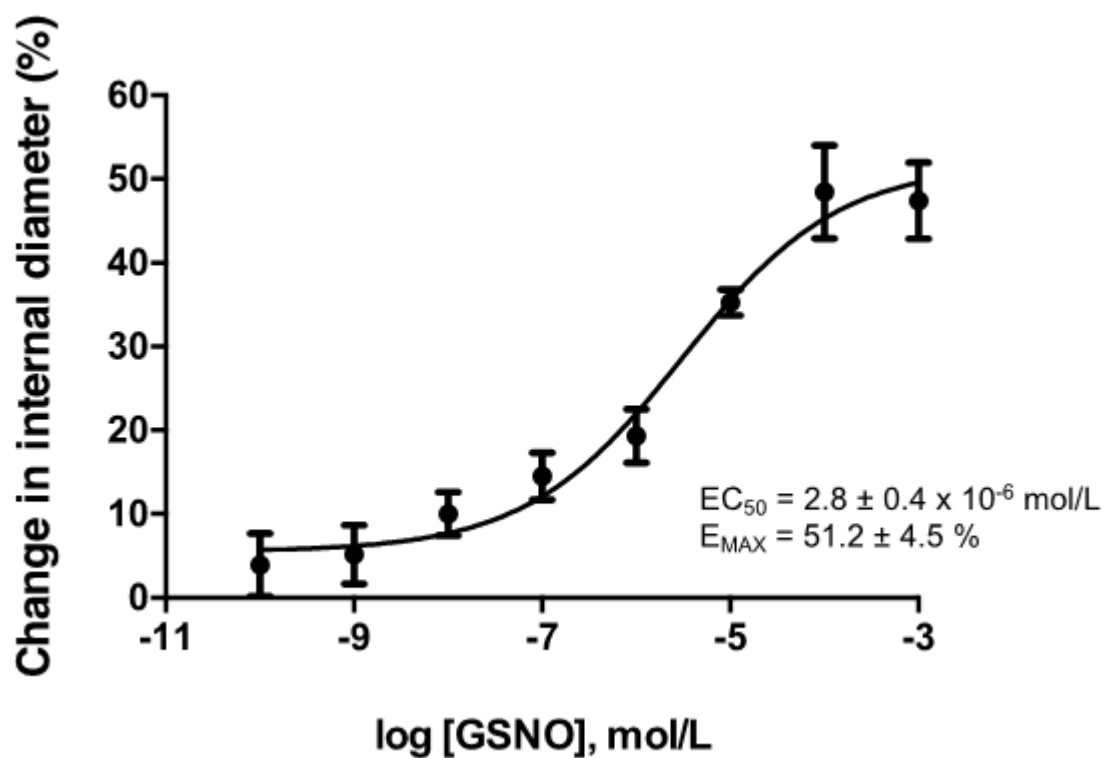


Fig. II. Effect of ODQ and DMSO on serotonin vasoconstriction

MCA were pretreated or not with GSNO and 1H-[1,2,4]Oxadiazolo[4,3-a]quinoxalin-1-one (ODQ, 10^{-5} mol/L) was added throughout the experiments. Dimethyl sulfoxide (DMSO, *i.e.* ODQ solvent, was used as control). Changes in internal diameter (%) are expressed as means \pm SEM. Two-way ANOVA (pretreatment, concentration) were used to calculate p values; *: $p < 0.05$ vs unexposed; \$: $p < 0.05$ vs DMSO (Bonferroni post-test).

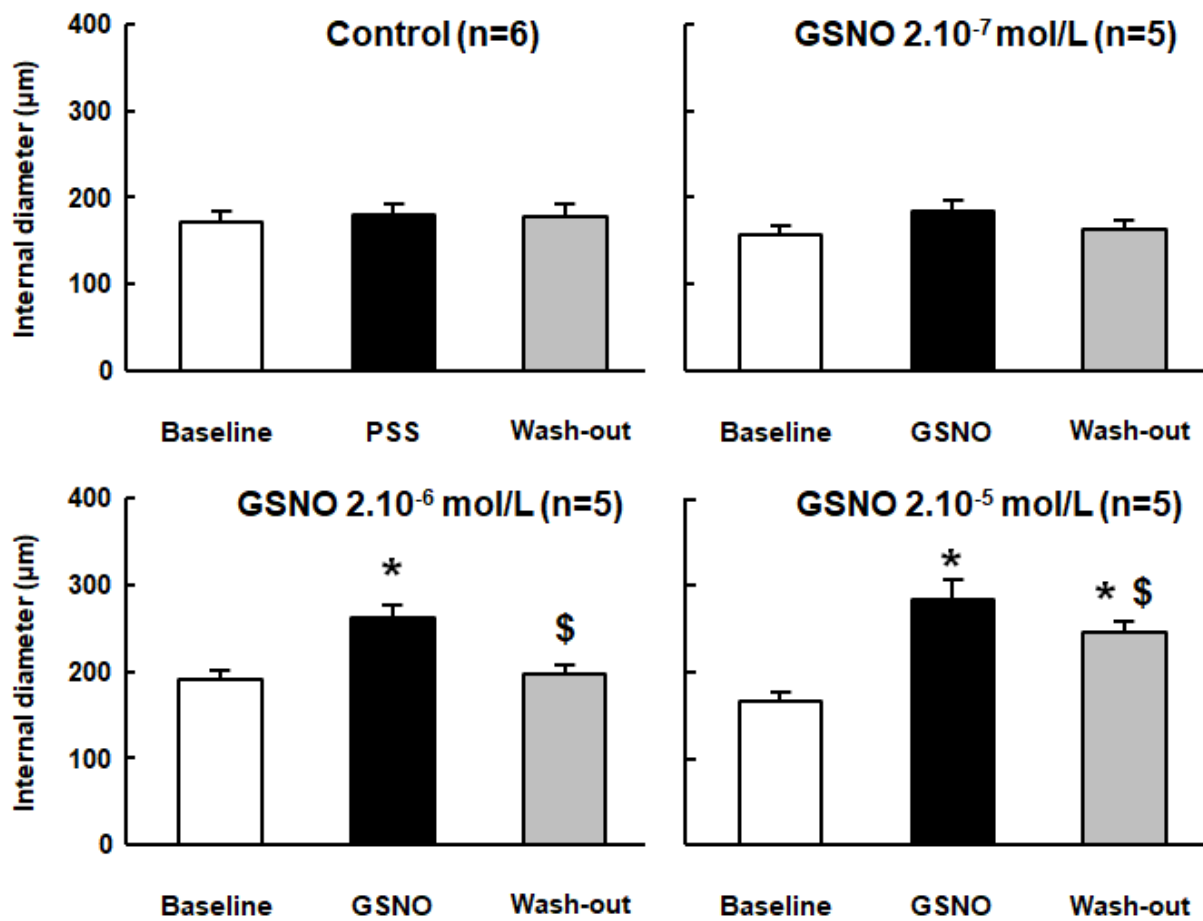


Fig. III. Concentration response curves to S-nitrosoglutathione

Concentration-response curves, half maximal effective concentration (EC_{50}) and maximal effect (E_{max}) in response to S-nitrosoglutathione (GSNO) of middle cerebral arteries isolated from Wistar rats.

Fitting to Hill's logistic equation was used. Values for EC_{50} (mol/L) and E_{max} (%) are expressed as means \pm SEM. n = 6 middle cerebral arteries.

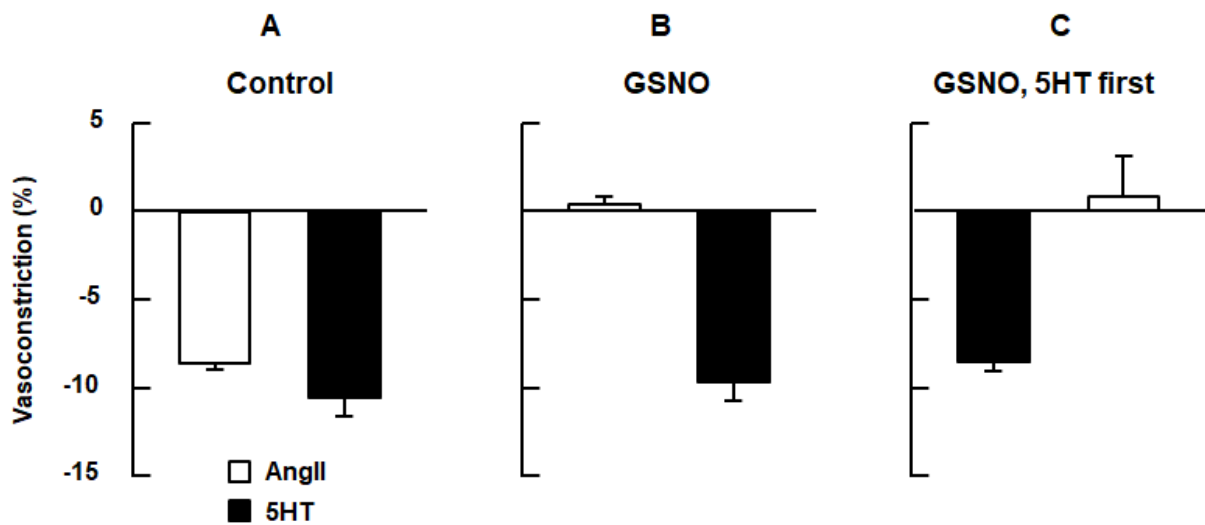


Fig. IV. Impact of S-nitrosoglutathione (GSNO) pretreatment on internal diameter

Internal diameters of rat middle cerebral arteries were measured before (baseline, open bars), after 30 min of exposure (full bars) to GSNO ($2 \cdot 10^{-7}$ mol/L, $2 \cdot 10^{-6}$ mol/L or $2 \cdot 10^{-5}$ mol/L) or physiological salt solution (PSS for controls) and following the on-hour wash-out (grey bars).

*: $p < 0.05$ vs baseline; \$: $p < 0.05$ vs GSNO (paired Student's t-test). Values are expressed as means \pm SEM.

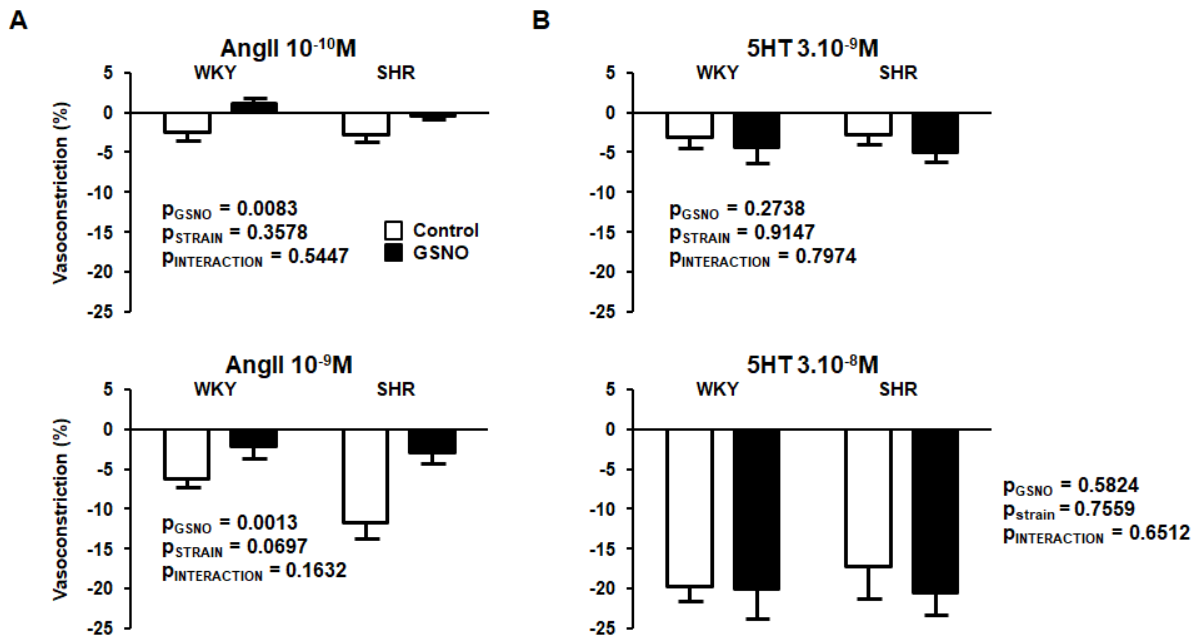


Fig. V. Ex vivo exposure to GSNO decreases Angiotensin II-mediated vasoconstriction in middle cerebral arteries from Spontaneously Hypertensive Rats

Vasoconstriction of middle cerebral arteries from Wistar Kyoto (WKY) rats or Spontaneous Hypertensive rats (SHR) in response to angiotensin II (AngII, panel A) and serotonin (5HT, panel B). Vessels were unexposed (open bar) or exposed (full bars) to *S*-nitrosoglutathione (GSNO, 2.10⁻⁶ mol/L), 30 min followed by a 1-hour wash out. Changes in internal diameter (%) are expressed as means \pm SEM. n=4-6 middle cerebral arteries per condition.