FLOW-MEDIATED VASCULAR REMODELING IN HYPERTENSION: RELATION TO HEMODYAMICS

Ibrahim: Hemodynamics of vascular remodeling in hypertension

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Table 1A. Baseline systolic blood pressure (SBP) and body weight (BW) in GH and BN rats.

		3 days (n=5)	7 days (n=5)	28 days (n=8-10)	Sham (28 days) (n=5)
SBP, mmHg	GH	151±2.8 **	154±2.4 ***	155±4.3 ***	146±1.7 ***
	BN	112±5.1	116±2.1	107±2.5	111±0.7
BW, g	GH	173±4.5	179±10.4	182±8.2	188±13.6
	BN	169±9.8	177±7.7	165±3.9 P=0.05	172±10.4

Values shown were obtained at day 0 when paired groups of animals (5-10 for each harvest time) were randomly chosen from litters to obtain similar body weights. ** P<0.01, *** P<0.001, GH vs. BN.

Table 1B. Baseline carotid arterial characteristics in GH and BN rats.

		LCA (low flow)				RCA (high flow)			
		3 days (n=5)	7 days (n=5)	28 days (n=8-10)	Sham (28 days) (n=5)	3 days (n=5)	7days (n=5)	28 days (n=8-10)	Sham (28 days) (n=5)
BF, ml/min	GH	2.59±0.21	2.86±0.18	2.67±0.19 *	2.79±0.22	2.77±0.10 **	3.37±0.33	2.63±0.12**	2.92±0.23
	BN	2.85±0.06	3.37±0.14	2.93±0.09	3.67±0.26	3.37±0.13	3.25±0.16	3.16±0.12	2.93±0.17
SS, dynes/cm^2	GH	13.1±1.31	13.9±0.87 *	18.9±1.15	14.1±1.59	14.1±0.52 **	15.3±1.36*	17.0±1.55	13.1±1.03
	BN	16.3±0.60	20.6±2.48	17.2±1.67	22.8±2.98	22.8±1.87	20.4±1.13	19.4±2.26	16.0±1.85
OD, mm	GH	1.06±0.01 *	1.07±0.03	0.94±0.03	1.06±0.03	1.05±0.02 ***	1.09±0.02**	0.99±0.03	1.10±0.01
	BN	1.01±0.01	1.00±0.04	1.02±0.03	1.00±0.02	0.96±0.02	0.98±0.03	1.01±0.04	1.03±0.03

Values shown were obtained at day 0 when paired groups of animals (5-10 for each harvest time) were randomly chosen from litters to obtain similar body weights * P<0.05, ** P<0.01, *** P<0.001, GH vs. BN

Table 2. Time-course of carotid media thickness in LCA and RCA (n=5-10 vessels for each time-point).

		LCA (low flow)				RCA (high flow)			
		3 days	7 days	28 days	Sham (28 days)	3 days	7days	28 days	Sham (28 days)
Media thickness, μm	GH	39.79±1.98¥¥	40.35±0.95	46.87±3.82 ¥¥	43.62±2.02	34.51±3.02	35.83±0.96	42.53±2.20 ¥¥	49.03±2.10
	BN	28.81±0.83	41.43±1.90	37.61±2.24	47.13±4.04 †	34.99±0.36	33.61±0.98	30.35±1.63	44.14±5.94 †