SUPPLEMENTAL MATERIAL

Supplemental Tables for Taheri et. al. "BBB in VCI"

Supplemental Table 1: Numbers of vascular cognitive impairment (VCI) patients and controls studied separated into preliminary diagnostic categories. Subcortical ischemic vascular disease (SIVD) had extensive white matter hyperintensities, focal neurological findings, and imbalance. The group included those with suspected mixed Alzheimer's disease and VCI. Large vessel or lacunar strokes (MI/LAC) had multiple large or lacunar strokes or a single strategic stroke. Patients with white matter hyperintensities with minimal symptoms were classified as leukoaraiosis (LA). Several patients could not be classified into one of these groups or were technical failures.

Diagnostic Groups	**Numbers of Subjects**	**Age** Mean years (SEM)
Subcortical ischemic vascular disease (SIVD)	36	65.64 (2.37)
Multiple strokes or single strategic stroke (MI/LAC)	8	55.88 (5.77)
Leukoaraiosis (LA)	9	60.00 (6.56)
Other Diagnosis and technical failures	7	-
Total	60	$F_{(2, 50)} = 1.53$, ns

Supplemental Table 2: Clinical Information on the patients in the groups identified by diagnoses

	SIVD*	MI	LA	Statistics
Male Sex (%)	22 (61%)	6 (75%)	4 (44%)	$\chi^2(2) = 1.68$, n.s.
Hypertension	19 (53%)	6 (75%)	2 (25%)	$\chi^2(2) = 4.04$, n.s.
Diabetes	9 (25%)	3 (38%)	0 (0%)	$\chi^2(2) = 3.41$, n.s.
Hyperreflexia	24 (67%)	80 (100%)	4 (50%)	$\chi^2(2) = 5.07$, p = .08
Imbalance	28 (78%)	5 (63%)	2 (25%)	$\chi^2(2) = 8.39$, p = .02
Stroke History	13 (36%)	7 (88%)	1 (11%)	$\chi^2(2) = 10.91$, p < .01

*Numbers(%)

Supplemental Table 3: Neuropsychological test results for patients in the groups

identified by diagnoses

	SIVD	MI	LA	Statistics
MMSE	26.59 (3.33)	28.12 (2.64)	28.00 (2.18)	$F(2,48) = 1.30$, n.s.
Attention[†]	42.12 (7.07)	44.75 (6.27)	44.12 (4.82)	$F(2,47) = 0.68$, n.s.
Memory[†]	41.18 (12.46)	43.75 (7.19)	46.25 (5.55)	$F(2,47) = 0.76$, n.s.
Language[†]	42.18 (8.90)	45.88 (9.12)	52.25 (10.46)	$F(2,47) = 4.03$, $p < .05$
Executive function[†]	42.15 (7.19)	45.12 (9.28)	47.12 (7.12)	$F(2,47) = 1.66$, n.s.

*Mean (SD); [†] Standardized T-Scores