

I. Findings and diagnosis

Brain Atrophy

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
Normal	Male	269	93.4	233	83.8	155	56.8	72	26.1	729	65.4
	Female	274	98.2	260	93.9	209	74.9	109	39.6	852	76.8
	Total	543	95.8	493	88.8	364	65.9	181	32.8	1581	71.1
Mild	Male	19	6.6	45	16.2	114	41.8	180	65.2	358	32.1
	Female	4	1.4	17	6.1	68	24.4	153	55.6	242	21.8
	Total	23	4.1	62	11.2	182	33.0	333	60.4	600	27.0
Moderate	Male	0	0	0	0	4	1.5	24	8.7	28	2.5
	Female	1	0.4	0	0	2	0.7	13	4.7	16	1.4
	Total	1	0.2	0	0	6	1.1	37	6.7	44	2.0
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Ventricular Dilatation

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
Normal	Male	242	84.0	172	61.9	113	41.4	34	12.3	561	50.3
	Female	250	89.6	235	84.8	159	57.0	58	21.1	702	63.2
	Total	492	86.8	407	73.3	272	49.3	92	16.7	1263	56.8
Mild	Male	44	15.3	101	36.3	136	49.8	141	51.1	422	37.8
	Female	27	9.7	41	14.8	103	36.9	161	58.5	332	29.9
	Total	71	12.5	142	25.6	239	43.3	302	54.8	754	33.9
Moderate	Male	2	0.7	5	1.8	23	8.4	98	35.5	128	11.5
	Female	2	0.7	1	0.4	17	6.1	55	20.0	75	6.8
	Total	4	0.7	6	1.1	40	7.2	153	27.8	203	9.1
Severe	Male	0	0	0	0	1	0.4	3	1.1	4	0.4
	Female	0	0	0	0	0	0	1	0.4	1	0.1
	Total	0	0	0	0	1	0.2	4	0.7	5	0.2
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Cerebrovascular Disease (CVD)

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
no CVD	Male	286	99.3	264	95.0	233	85.3	194	70.3	977	87.6
	Female	274	98.2	269	97.1	259	92.8	216	78.5	1018	91.7
	Total	560	98.8	533	96.0	492	89.1	410	74.4	1995	89.7
CVD	Male	2	0.7	14	5.0	40	14.7	82	29.7	138	12.4
	Female	5	1.8	8	2.9	20	7.2	59	21.5	92	8.3
	Total	7	1.2	22	4.0	60	10.9	141	25.6	230	10.3
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Lacuna

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
no lacuna	Male	286	99.3	268	96.4	236	86.4	201	72.8	991	88.9
	Female	277	99.3	271	97.8	261	93.5	227	82.5	1036	93.3
	Total	563	99.3	539	97.1	497	90.0	428	77.7	2027	91.1
one lacuna	Male	1	0.3	5	1.8	24	8.8	43	15.6	73	6.5
	Female	2	0.7	6	2.2	14	5.0	34	12.4	56	5.0
	Total	3	0.5	11	2.0	38	6.9	77	14.0	129	5.8
multiple lacune	Male	1	0.3	5	1.8	13	4.8	32	11.6	51	4.6
	Female	0	0	0	0	4	1.4	14	5.1	18	1.6
	Total	1	0.2	5	0.9	17	3.1	46	8.3	69	3.1
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Thrombosis

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
no thrombosis	Male	288	100.0	274	98.6	268	98.2	263	95.3	1093	98.0
	Female	278	99.6	276	99.6	279	100.0	266	96.7	1099	99.0
	Total	566	99.8	550	99.1	547	99.1	529	96.0	2192	98.5
thrombosis	Male	0	0	4	1.4	5	1.8	13	4.7	22	2.0
	Female	1	0.4	1	0.4	0	0	9	3.3	11	1.0
	Total	1	0.2	5	0.9	5	0.9	22	4.0	33	1.5
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Cerebral Embolism

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
no embolism	Male	288	100.0	277	99.6	273	100.0	273	98.9	1111	99.6
	Female	278	99.6	276	99.6	278	99.6	272	98.9	1104	99.5
	Total	566	99.8	553	99.6	551	99.8	545	98.9	2215	99.6
embolism	Male	0	0	1	0.4	0	0	3	1.1	4	0.4
	Female	1	0.4	1	0.4	1	0.4	3	1.1	6	0.5
	Total	1	0.2	2	0.4	1	0.2	6	1.1	10	0.4
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Cerebral Bleeding

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
no bleeding	Male	288	100.0	277	99.6	272	99.6	275	99.6	1112	99.7
	Female	278	99.6	276	99.6	278	99.6	273	99.3	1105	99.5
	Total	566	99.8	553	99.6	550	99.6	548	99.5	2217	99.6
cerebral bleeding	Male	0	0	1	0.4	1	0.4	1	0.4	3	0.3
	Female	1	0.4	1	0.4	1	0.4	2	0.7	5	0.5
	Total	1	0.2	2	0.4	2	0.4	3	0.5	8	0.4
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

Periventricular hyperintensity (PVH)

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not examined	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	0	0	1	0.4	1	0.1
	Total	0	0	0	0	0	0	1	0.2	1	0.0
no PVH	Male	281	97.6	247	88.8	161	59.0	98	35.5	787	70.6
	Female	267	95.7	247	89.2	188	67.4	91	33.1	793	71.4
	Total	548	96.6	494	89.0	349	63.2	189	34.3	1580	71.0
mild PVH	Male	6	2.1	20	7.2	83	30.4	83	30.1	192	17.2
	Female	10	3.6	28	10.1	56	20.1	88	32.0	182	16.4
	Total	16	2.8	48	8.6	139	25.2	171	31.0	374	16.8
moderate PVH	Male	1	0.3	11	4.0	23	8.4	85	30.8	120	10.8
	Female	2	0.7	2	0.7	31	11.1	80	29.1	115	10.4
	Total	3	0.5	13	2.3	54	9.8	165	29.9	235	10.6
severe PVH	Male	0	0	0	0	6	2.2	10	3.6	16	1.4
	Female	0	0	0	0	4	1.4	15	5.5	19	1.7
	Total	0	0	0	0	10	1.8	25	4.5	35	1.6
Total	Male	288	100.0	278	100.0	273	100.0	276	100.0	1115	100.0
	Female	279	100.0	277	100.0	279	100.0	275	100.0	1110	100.0
	Total	567	100.0	555	100.0	552	100.0	551	100.0	2225	100.0

## 2. Measurements

### Total area of brain parenchyma (cm<sup>3</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1453.1	112.3	77	1400.8	117.7	72	1375.0	117.9	66	1320.6	120.4	71	1389.0	126.1	286
Female	1279.5	124.4	65	1253.3	82.9	77	1234.5	90.7	76	1222.5	89.3	69	1246.9	98.9	287
Total	1373.6	146.1	142	1324.6	125.1	149	1299.8	125.4	142	1272.2	116.7	140	1317.8	133.7	573

### Whole brain volume (cm<sup>3</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1380.4	106.7	77	1330.8	111.9	72	1306.2	112.0	66	1254.5	114.4	71	1319.6	119.8	286
Female	1215.6	118.2	65	1190.6	78.7	77	1172.8	86.1	76	1161.3	84.8	69	1184.5	93.9	287
Total	1305.0	138.8	142	1258.3	118.8	149	1234.8	119.1	142	1208.6	110.9	140	1251.9	127.0	573

### Area of vermis in midsagittal slice (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	8.9	1.2	78	8.7	1.2	73	8.7	1.1	66	8.3	1.1	71	8.7	1.2	288
Female	8.3	1.1	66	8.4	1.1	79	8.3	1.1	76	8.0	1.1	70	8.2	1.1	291
Total	8.6	1.2	144	8.5	1.2	152	8.5	1.1	142	8.1	1.1	141	8.4	1.2	579

### Area of ventral pons in midsagittal slice (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.0	0.3	78	3.0	0.4	73	3.0	0.4	66	2.9	0.4	71	3.0	0.4	288
Female	2.8	0.3	66	2.8	0.3	79	2.8	0.3	76	2.8	0.3	70	2.8	0.3	291
Total	2.9	0.3	144	2.9	0.4	152	2.9	0.4	142	2.9	0.4	141	2.9	0.4	579

### Area of corpus callosum in midsagittal slice (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	5.5	0.7	78	5.4	0.7	73	5.3	0.8	66	4.9	0.9	71	5.3	0.8	288
Female	5.1	0.7	66	5.2	0.7	79	5.2	0.7	76	4.9	0.6	70	5.1	0.7	291
Total	5.3	0.7	144	5.3	0.7	152	5.2	0.7	142	4.9	0.8	141	5.2	0.7	579

Cross-sectional area of skull in midsagittal slice(cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	130.4	8.7	78	127.5	9.6	73	126.4	8.7	65	126.5	8.8	71	127.8	9.1	287
Female	120.5	9.0	66	119.6	7.2	79	118.6	8.0	76	119.3	7.7	70	119.5	7.9	291
Total	125.9	10.1	144	123.4	9.3	152	122.1	9.2	141	122.9	9.0	141	123.6	9.5	578

Area of lateral ventricle (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	7.5	3.4	78	9.0	3.6	72	10.8	4.3	66	13.4	4.5	71	10.1	4.5	287
Female	6.3	2.8	66	6.7	2.8	79	8.9	3.8	76	11.5	4.4	70	8.3	4.0	291
Total	7.0	3.2	144	7.8	3.4	151	9.8	4.2	142	12.5	4.5	141	9.2	4.4	578

Area of brain parenchyma(cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	155.7	8.5	78	151.7	7.8	72	149.7	9.4	66	145.7	8.8	71	150.8	9.3	287
Female	144.9	8.6	66	141.1	7.7	79	139.4	7.6	76	137.5	6.7	70	140.7	8.1	291
Total	150.7	10.1	144	146.2	9.4	151	144.2	9.9	142	141.6	8.8	141	145.7	10.1	578

Area of subarachnoid CSF(forward from the tip of lateral ventricle) (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.0	1.6	78	3.5	1.4	72	4.3	1.9	66	5.7	2.3	71	4.1	2.1	287
Female	2.2	1.1	66	2.7	1.3	79	3.4	1.7	76	3.9	1.6	70	3.1	1.6	291
Total	2.7	1.4	144	3.1	1.4	151	3.8	1.8	142	4.8	2.2	141	3.6	1.9	578

Area of subarachnoid CSF(subarachnoid CSF from anterior horn to posterior horn) (cm<sup>2</sup>)

	40-49yr			50-59yr			60-69yr			70-80yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.7	1.1	78	3.2	1.1	72	4.0	1.6	66	5.2	2.9	71	3.7	2.0	287
Female	1.9	0.9	66	2.3	1.0	79	3.0	1.1	76	3.7	1.6	70	2.8	1.4	291
Total	2.4	1.1	144	2.7	1.1	151	3.5	1.5	142	4.5	2.4	141	3.2	1.8	578