

ON-LINE FIGURE. Scatterplot illustrating the correlation between the MMSE score and cerebral blood flow in the pons in patients with iNPH. Spearman correlation, r=0.71, P<.001.

On-line Table 1: Correlations between CBF and clinical symptoms^a

	MMSE Score	Incontinence Scale	Romberg Test	Gait Speed
Cerebellum	0.63 ^b	-0.013	-0.15	-0.082
MFC	0.45 ^c	-0.16	0.20	-0.30
Lentiform nucleus	0.23	0.31	0.13	0.10
MTL	0.027	0.29	-0.25	0.28
HCC	0.40	0.27	-0.17	0.34
Pons	0.71 ^d	0.076	-0.093	0.11
SMA	0.27	0.27	-0.091	0.23
Thalamus	0.54 ^c	-0.095	0.11	-0.11
Frontal WM	0.54 ^c	-0.24	0.15	-0.096
Lateral WM	0.45 ^c	-0.069	0.17	-0.036
Superior WM	0.44 ^c	0.17	0.088	0.027
Periventricular WM	0.60 ^b	-0.11	0.16	0.0013

Note:—HCC indicates high-convexity cortex; MFC, medial frontal cortex; MTL, medial temporal lobe; SMA, supplementary motor area.

On-line Table 2: Correlations between morphologic imaging findings and clinical symptoms^a

	DWMH	DESH	CA	Evans Index Score
Cerebellum	-0.037	0.18	-0.30	-0.068
MFC	-0.25	0.067	0.0019	-0.27
Lentiform nucleus	0.14	0	0.31	-0.46 ^b
MTL	-0.053	0.37	-0.13	0.074
HCC	-0.19	0.42	-0.23	0.039
Pons	-0.20	0.033	-0.21	0.0065
SMA	-0.25	0.45 ^b	0.0052	-0.12
Thalamus	-0.11	-0.017	-0.31	-0.078
Frontal WM	-0.60°	-0.013	-0.29	0.047
Lateral WM	-0.16	0.050	−0.50 ^b	0.078
Superior WM	-0.23	0.30	-0.33	0.17
Periventricular WM	-0.44 ^b	-0.05	-0.23	-0.23

Note:—DESH indicates disproportionately enlarged subarachnoid space hydrocephalus; CA, callosal angle; HCC, high-convexity cortex; MFC, medial frontal cortex; MTL, medial temporal lobe; SMA, supplementary motor area.

^a Numbers in cells are Spearman correlation coefficients. r = 40-50, interpreted as a moderate correlation. r > 0.60, interpreted as a strong correlation.

 $^{^{\}rm b}$ P < .01.

 $^{^{\}rm c}$ P < .05. $^{\rm d}$ P < .001.

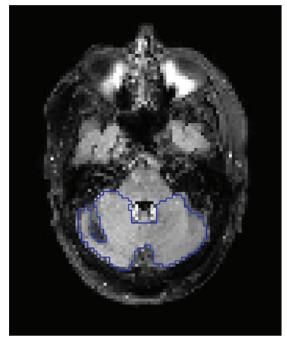
^a Numbers in cells are Spearman correlation coefficients. r = 40-50, interpreted as a moderate correlation. r > 0.60, interpreted as a strong correlation.

 $^{^{\}rm b}P$ < .05.

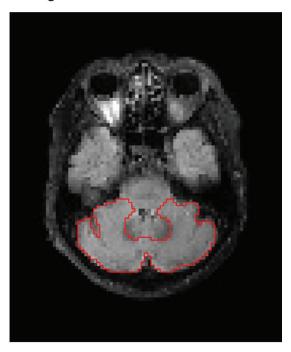
 $^{^{\}rm c}$ P < .01.

ON-LINE APPENDIX

Examples of regions of interests (ROIs) drawn on coregistred FLAIR images. Patients with iNPH to the left with respective matched control to the right.



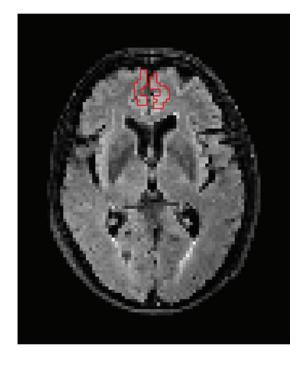
Cerebellum in a patient with iNPH. Measured on two slices, with the inferior slice at the level of the middle cerebellar peduncle.



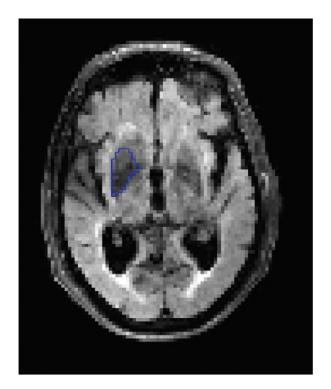
Cerebellum in a matched control.



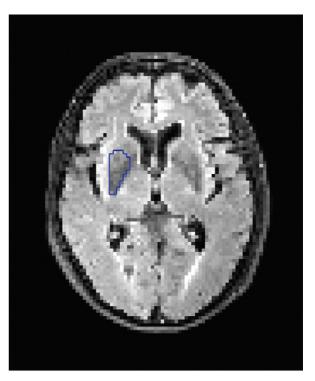
Medial frontal cortex in a patient with iNPH. Measured on three slices and the ROIs were 2-3 voxels wide.



Medial frontal cortex in a matched control.



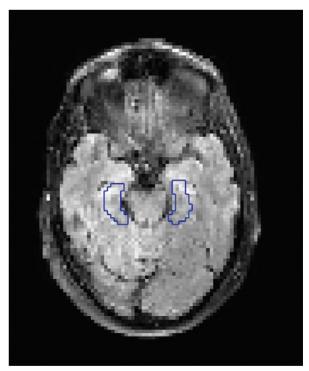
Right lentiform nucleus in a patient with iNPH. Measured bilaterally on one slice at the level of the foramina of Monro.



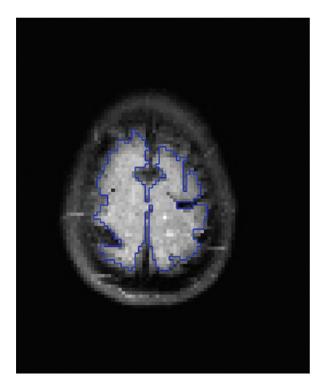
Right lentiform nucleus in a matched control.



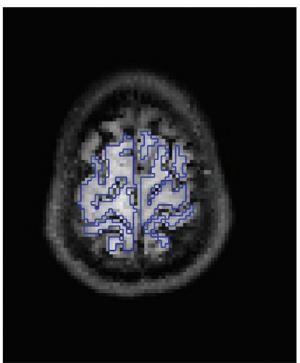
Medial temporal lobe in a patient with iNPH. Measured bilaterally on one slice at the level of the temporal horns.



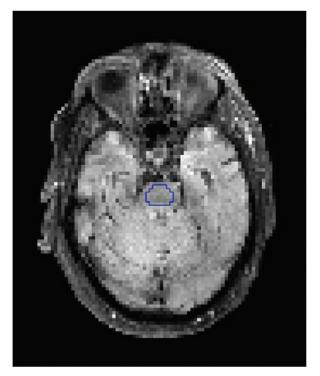
Medial temporal lobe in a matched control.



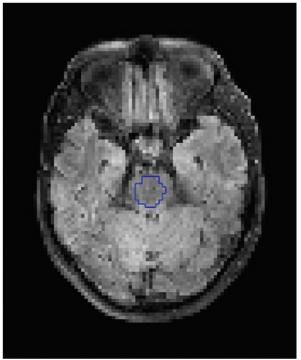
High convexity cortex in a patient with iNPH. Measured on the two most superior slices of the brain.



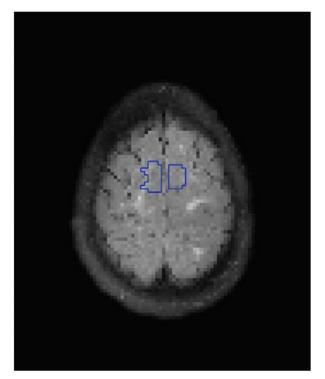
High convexity cortex in a matched control.



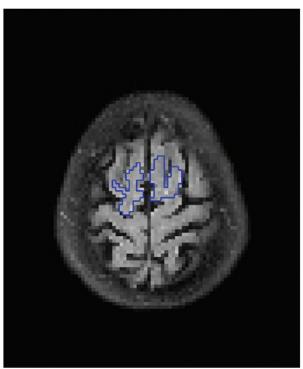
Pons in a patient with iNPH. Measured on three slices with the middle slice at the level of the middle cerebellar peduncles.



Pons in a matched control.



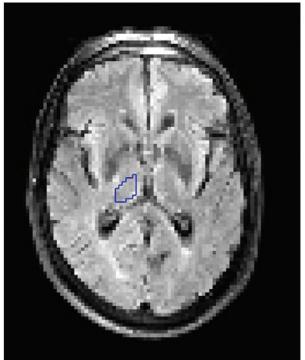
Supplementary motor area in a patient with iNPH. Measured on two slices.



Supplementary motor area in a matched control.



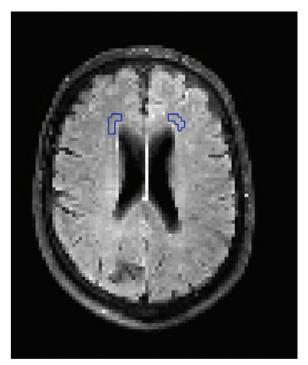
Thalamus in a patient with iNPH. Measured on two slices bilaterally with the superior slice at the level of the foramina of Monro.



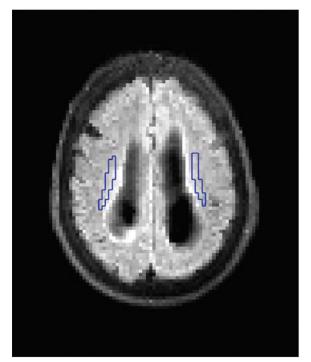
Thalamus in a matched control.



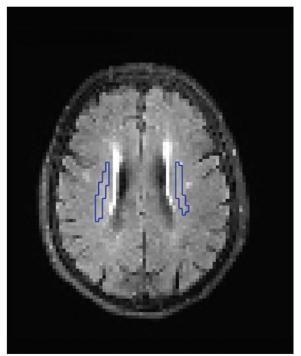
Frontal white matter in a patient with iNPH. Measured on two slices 5-10 mm from the ventricles at the level of the cella media.



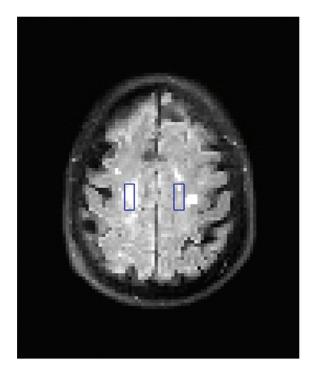
Frontal white matter in a matched control.



Lateral white matter in a patient with iNPH. Measured on two slices 5-10 mm from the ventricles at the level of the sella media.



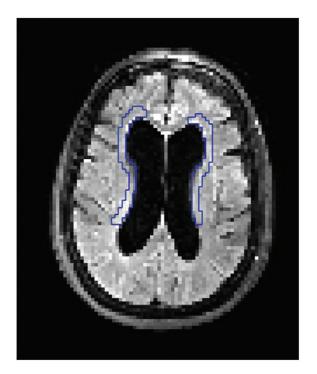
Lateral white matter in a matched control.



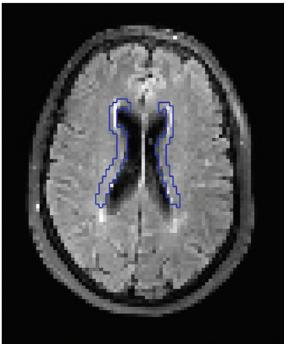
Superior white matter in a patient with iNPH. Measured on two slices. The inferior ROI was placed in the first slice superior of the lateral ventricles.



Superior white matter in a matched control.



Periventricular white matter in a patient with iNPH. Measured on one slice at the level of the sella media.



Periventricular white matter in a matched control.

Explanations why nine patients were not diagnosed with probable iNPH

Female, 78 years of age

Meningitis at age 16 and head trauma with fractures of the base of the skull at age 26. Symptom debut at age 76. Diagnosis possible iNPH.

Female, 78 years of age

Head trauma with short observation at hospital at age 47. Symptom debut at age 76. Diagnosis possible iNPH.

Male, 81 years of age

A small porencephalic cyst in connection with one of the lateral ventricles but not close to the foramina of Monro. Diagnosis possible iNPH.

Male, 71 years of age

Only gait disturbance and no evident cognitive or urinary disturbance. Cervical spinal stenosis as comorbidity. Diagnosis possible iNPH.

Male, 68 years of age

Severe white matter hyperintensities in the brain seen on MRI. Diagnosis possible iNPH.

Male, 71 years of age

Gait disturbance affected by Parkinsonism. Diagnosis unlikely iNPH and Parkinsons disease.

Male, 79 years of age

MRI shows Aqueductal stenosis. Diagnosis unlikely iNPH and non-communicating hydrocephalus.

Female, 66 years of age

Symptom debut after a head truma. However, the first CT and MRI scan after the head trauma already revealed communicating hydrocephalus. Diagnosis possible iNPH.

Male, 71 years of age

Parkinsonism and hyperreflexia of lower limbs. Severe white matter hyperintensities in the brain seen on MRI. Improved after administration of L-dopa. Diagnosis unlikely iNPH.