

CT MRI : 3 1

(computed tomogram, CT)
(magnetic resonance image, MRI) 가 (putamen)
(chorea) (1) (2)
CT 3 가
2 T1- MRI
(putamen)

(basal ganglia) T1- MRI
150/90mmHg 449 ml/dl
, Wilson ,
(1). CT
(globus pal- 가 MRI T1- CT
lidus) (Fig. 1A).
(2). CT MRI T1- (Fig.
(hyperglycemic encephalopathy) 1B) T2- (Fig. 1C).
(caudate nucleus)
(3). 가 (glucose tolerance test)
가 CT 가
(3), T1- MRI , T2- MRI
3 2
75 가
5
140/80mmHg 345
mg/dl CT 가
69 가 (Fig. 2A)
(chorea) MRI
Fig. 2B). T2- (Fig. 2C),
(polyuria) (polydypsia) 가 T1-

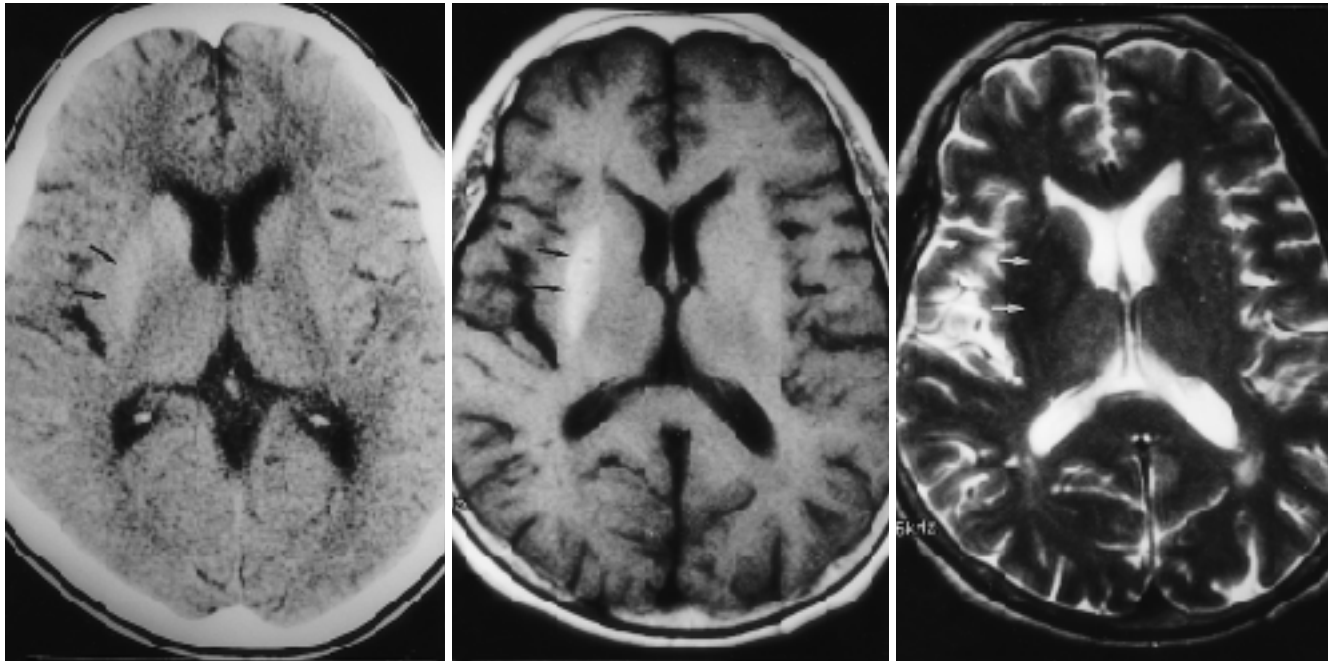


Fig. 1. 69-year-old woman with acute onset of chorea.
 A. Non-enhanced CT shows a high density lesion in right putamen (arrows).
 B. T1-weighted MR image reveals homogeneous high signal intensity in right putamen (arrows).
 C. T2-weighted MR image shows slightly inhomogeneous low signal intensity in right putamen (arrows).

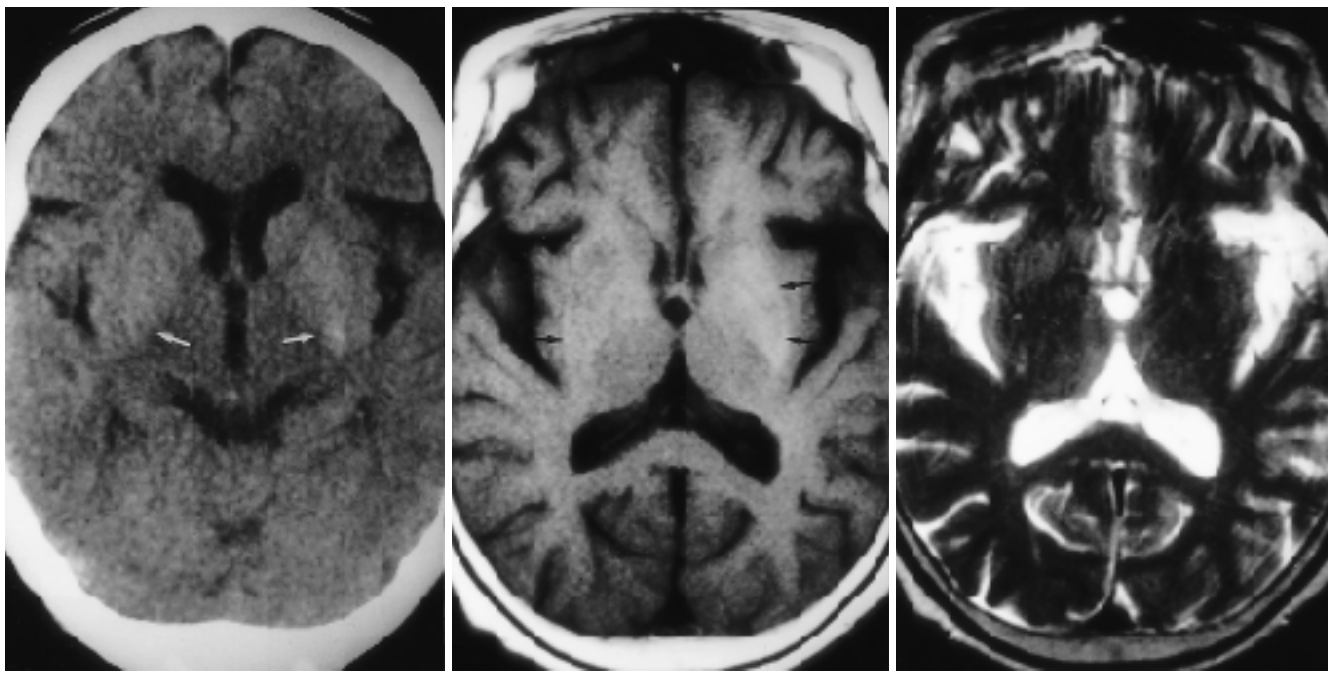


Fig. 2. 75-year-old woman with confusional mentality.
 A. Non-enhanced CT shows subtle high density lesions in both putamens (arrows).
 B. On T1-weighted MR image, left putamen shows diffuse high signal intensity (arrows). Focal slightly high signal intensity is also noted in right putamen (arrow).
 C. T2-weighted MR image shows subtle low signal intensities in both putamens.

3
56 가
(percutaneous transluminal coronary angioplasty, PTCA)
15 CT
268ml/dl
CT
(Fig. 3)

(3, 4).
가

(4-6) CT
가
MRI T1-
, T2-
Nagai (4) MRI
(demyelination)

Lai (5) 가 CT , T1- MRI

Shan (6)
10
1 가

(gemisto-
cytes) T1-

가 가
, T2- T1-

(7)

가 가 가 (8).

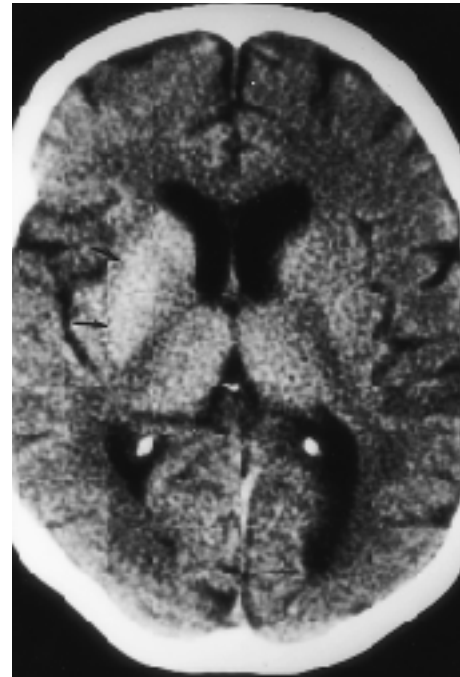


Fig. 3. 56-year-old woman with mental change.
Non-enhanced CT scan shows a high density lesion in right basal ganglia (arrows).

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CT and MRI Findings in Patients with Hyperglycemic Encephalopathy : Three Cases Report¹

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We describe the distinctive brain CT and MRI findings seen in the putamen of three patients with hyperglycemia. The chief complaint of these patients was either chorea (n= 1) or mental change (n= 2). They showed hyperglycemia, but physical examination and laboratory data revealed no other abnormalities.

In all patients, non-enhanced CT scanning revealed high-attenuated lesions in the unilateral putamen. In two of the three patients, brain MRI performed two days after the onset of symptoms showed an abnormally high signal on T1-weighted images and a low signal on T2-weighted images.

One patient had a history of diabetes mellitus, and another had acute myocardial infarction. The third had no specific history. After the correction of hyperglycemia, the patient's symptoms subsided and diabetes mellitus was diagnosed.

Index words : Brain, CT
Brain, MR
Encephalopathy

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