

## [ PICTURES IN CLINICAL MEDICINE ]

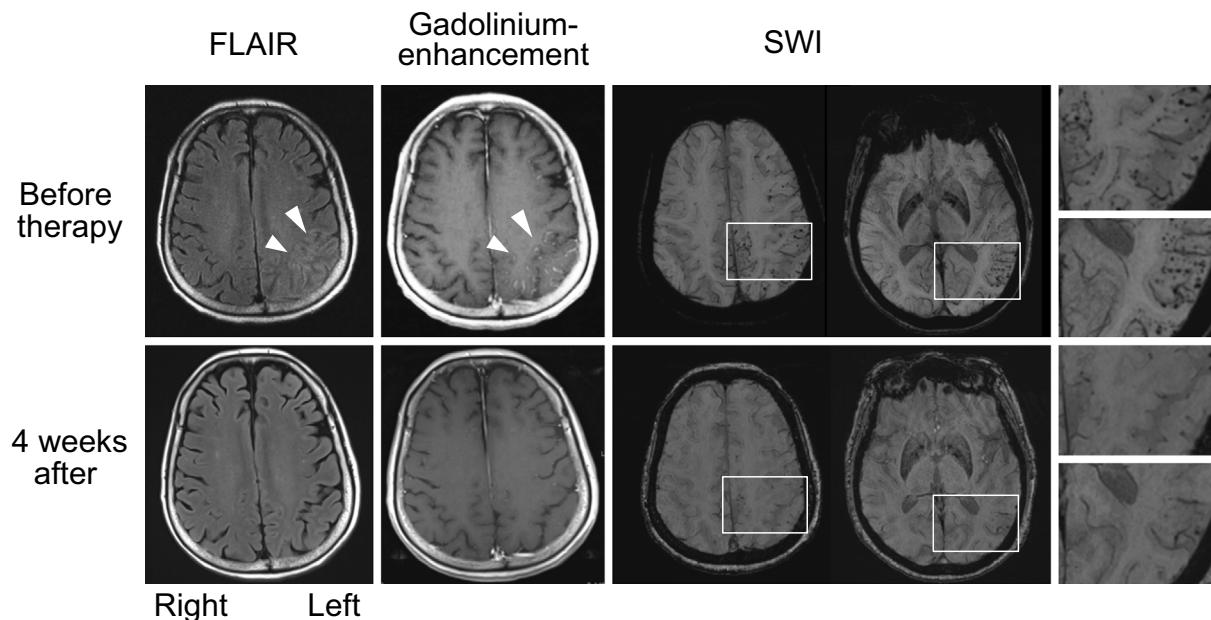
## Abnormalities on Brain Susceptibility-weighted Imaging in Neuro-Sweet Disease

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**Key words:** neuro-Sweet disease, susceptibility-weighted imaging, microbleeds, meningoencephalitis, magnetic resonance imaging

(Intern Med 56: 2961-2962, 2017)

(DOI: 10.2169/internalmedicine.8674-16)



**Picture 1.**

An 81-year-old woman presented with a one-week history of pyrexia ( $38.6^{\circ}\text{C}$ ), headache, acalculia, and hemianopia. Laboratory examinations revealed an elevated leukocyte count ( $10,000/\text{mm}^3$ ), neutrophil count ( $8,200/\text{mm}^3$ ), and erythrocyte sedimentation rate (43 mm/h). CSF study revealed pleocytosis ( $33/\text{mm}^3$ ) and an elevated protein level (402 mg/dL). MRI showed leptomeningeal gadolinium enhancement (arrowheads) and multiple cortical-subcortical areas of dotted signal loss in the left parieto-occipital lobes on susceptibility-weighted imaging (SWI) (Picture 1). Neuro-Sweet disease (NSD) was diagnosed in accordance with the proposed diagnostic criteria based on the HLA type (B54 and Cw1), the presence of painful erythema nodosum (Pic-

ture 2), and the detection of neutrophilic infiltration on skin biopsy (1). Corticosteroid therapy led to the effective improvement of the clinical symptoms and a partial improvement in the MRI abnormalities.

To the best of our knowledge, this is the first reported case of NSD in which marked leptomeningeal abnormalities were detected on SWI. The abnormalities were considered to consist of cerebral microbleeds and treatable congested veins, which were caused by the vasculopathy associated with Sweet disease. Actually, one autopsy case of NSD with microbleeds and congested veins has been reported (2). Because SWI abnormalities are likely to go undetected in an incomplete examination, a neuroradiological analysis based

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Received: December 9, 2016; Accepted: March 9, 2017; Advance Publication by J-STAGE: September 25, 2017

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## Right forearm



## Left limb



**Picture 2.**

on the SWI data should be performed for patients with NSD.

Written informed consent for publication of this case report

was obtained from the patient.

**The authors state that they have no Conflict of Interest (COI).**

### Acknowledgement

The authors are grateful to T. Kiriyama (Department of Neurology, Nara Medical University School of Medicine) for his help in clinical diagnosis. The authors also thank A. Okazaki and H. Asada (Department of Dermatology, Nara Medical University School of Medicine) for their help in the dermatological studies.

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*Intern Med* 56: 2961-2962, 2017