

tional incontinency in a 34-year-old man and the correlation of the metabolic changes seen with his change in cognitive and emotional state. This type of quantitative analysis can provide that information, unlike a subjective radiological evaluation limited with MRI and CT. A greater understanding of the functional activity of the underlying regions affected by Fahr's syndrome may help to provide insight into specific networks involved.

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A Novel View on the Pharmacodynamics of Rosiglitazone and Introducing Some Potential Drugs in Ameliorating Alzheimer's Disease

SIR: Alzheimer's disease is a progressive and fatal neurodegenerative disorder manifested by cognitive and memory deterioration, progressive impairment of daily living activities, and a variety of neuropsychiatric symptoms and behavioral disturbances.

Increasing evidence shows that neurotoxicity is mediated by CNS inflammatory processes, which involve activation of the microglia by the amyloid-beta, leading to the release of proinflammatory cytokines, including interleukin-6 (IL-6) and tumor necrosis factor-alpha (TNF-alpha). Neurotoxic processes mediated by these cytokines may include direct neuronal death by enhancement of apoptosis, decreased synaptic function, and inhibition of hippocampal neurogenesis.¹

Rosiglitazone is used in some studies for improving the symptoms of Alzheimer's disease but there is controversy about its mechanism of action.²

There is evidence that shows the effect of rosiglitazone in reducing IL-6.³ Although a study has shown that rosiglitazone cannot reduce IL-6,⁴ it seems that this study was not maintained long enough to determine this effect.

In addition, a study showed that poor sleep is associated with higher interleukin-6 in older caregivers of people with Alzheimer's disease.⁵

According to aforementioned studies, we hypothesize that one of the mechanisms of action of rosiglitazone in ameliorating Alzheimer's disease is reducing IL-6. Moreover, it seems that this drug can improve the sleep of people with Alzheimer's disease.

Prescribing other IL-6 reducers as clenbuterol may be a good treatment for Alzheimer's disease. On the other hand, TNF-alpha antagonists, like thalidomide, infliximab, etanercept, and adalimumab, may be effective in Alzheimer's disease.

Surely, clinical trials are needed to validate our hypothesis.

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Impaired Knowledge for Fruits and Vegetables in Semantic Dementia

SIR: Semantic dementia is a unique frontotemporal lobar degeneration characterized by the loss of meaning or knowledge for words and

objects.^{1,2} The semantic loss in semantic dementia can disproportionately impair the recognition of fruit and vegetables.³⁻⁵

Case Report

A 56-year-old woman presented with 2 to 3 years of marked changes in dietary behavior. A committed lifelong vegetarian, she gradually lost the ability to recognize fruits and vegetables, either by sight or taste. She stopped eating them and switched to eating animal products and processed foods. In addition, the patient lost the meaning of the word "vegetarian."

On examination, the patient had difficulty finding words. Her Mini-Mental State Examination (MMSE) score was 10/30 because of severe word comprehension difficulty. Naming and identification were impaired, particularly for fruits and vegetables. She scored 1/15 on the short-version Boston Naming Test (BNT) and could not define most of the missed items. The rest of her neuropsychological assessment showed surface dyslexia and prosopagnosia. Her general and neurological examinations were normal.

Neuroimaging corroborated the clinical diagnosis of semantic dementia. Magnetic resonance imaging (MRI) showed bilateral anterior temporal lobe atrophy, and a positron emission tomography scan disclosed anterior temporal hypometabolism. The patient was treated with sertraline and citalopram but without impact on her eating behavior.

Case Report

A 54-year-old woman presented with 2 to 3 years of progressive word loss. Her family complained that she had stopped eating fruits and vegetables and could not taste them. Since the patient was unable to recognize produce in the grocery store, her family provided her with pictures of items, such as carrots or apples, so that she could buy fruits and vegetables by matching them with their pictures.

On examination, the patient had difficulty finding words. Her MMSE score was 29/30, and she generated a word list of 10 animals/min but only 4 foods/vegetables a minute. Confrontational naming was impaired, particularly for fruits and vegetables, and she scored 10/60 on the BNT. The patient had difficulty comprehending many of the words. The rest of her neuropsychological assessment showed surface dyslexia and prosopagnosia. Her neurological examination was within normal limits.

Similar to the first patient, her MRI and single photon emission tomography scans showed bitemporal involvement. The patient was managed with sertraline and counseling, without changes in her eating behavior.

Comment

Changes in food preferences in semantic dementia may be due to a loss of semantic knowledge for fruits and vegetables possibly over other foods. Although semantic dementia patients usually have gener-

alized semantic deficits,² the loss of knowledge for the specific category of fruits and vegetables can result from brain lesions affecting inferior lateral temporal regions.^{4,5} A major theory for category specificity in the brain proposes an evolutionary basis for acquired deficits in fruits and vegetables.² The rapid and efficient identification of edible fruits and vegetables could have had an advantage for survival and, hence, be "programmed" in the brain. A disproportionate loss of this ability could explain alterations in food preferences in some patients with semantic dementia.

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