



# Oral Cenesthopathy Proceeding Dementia with Lewy Body: a Case Report

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## Abstract

We herein report a case of oral cenesthopathy that proceeded dementia with Lewy body (DLB). A 70-year-old female presented with oral cenesthopathy. She was diagnosed with major depression/late-onset schizophrenia and treated with paroxetine and perospirone. Subsequently, she developed severe parkinsonism. Her diagnosis changed to DLB based on clinical features and her magnetic resonance imaging, MIBG scintigraphy, and DAT scans. After tapering off paroxetine and perospirone, the patient was treated with donepezil and levodopa. The DLB symptoms, including oral cenesthopathy and parkinsonism, were relieved. This case indicates that oral cenesthopathy may occur as an early symptom of DLB.

**Keywords** Oral cenesthopathy · Dementia with Lewy body · Parkinsonism

## Introduction

Somatic hallucination is defined as the false sensation of an occurrence in the body. When the hallucination is grotesque and visceral, it is classified as a cenesthopathy [1]. Cenesthopathy is likely influenced by culture; one study reported that, of the seven unique countries from which patients were recruited, those from Ghana and those with chronic schizophrenia were significantly more likely to report cenesthesia [2].

Dementia with Lewy body (DLB) is a common cause of dementia in the elderly, accounting for 15–25% of dementia cases [3]. Evidence suggests DLB may be underdiagnosed, often being mistaken for mood disorders [4]. Some patients are even misdiagnosed with mood disorders or late-onset schizophrenia and treated with antidepressants or antipsychotics [4], which may subsequently worsen parkinsonism. A clinical distinction is important, as it has profound implications for management and prognosis.

We present herein a case of persistent cenesthopathy proceeding DLB that was successfully treated with donepezil and levodopa.

## Case Presentation

A 70-year-old female retired high school teacher presented with complaints of a sensation of her teeth melting and swelling in her gums. At 68 years of age, she consulted a dentist due to the feeling of incongruity in her oral cavity. Although her oral discomfort transiently improved after the oral care instructed by the dentist, the symptoms soon relapsed and persisted. She was diagnosed with major depression at an outpatient's clinic, treated with paroxetine (20mg/day), and referred to our university hospital. Her psychiatric symptoms included oral cenesthopathy, depressed mood, persecutory delusion, auditory hallucination, and impaired attention and concentration. Her diagnosis was changed to late-onset schizophrenia, and she was treated with aripiprazole (24mg/day) and paroxetine (20mg/day). She did not have any adverse effects including parkinsonism for the treatment with paroxetine and aripiprazole.

Her psychiatric symptoms were relieved. Six months later, she again presented with oral cenesthopathy accompanied by persecutory delusion, depressed mood, attention deficits, and anxiety. Aripiprazole was tapered off, and perospirone was gradually increased to 36 mg/day. She then presented with parkinsonism, including finger tremor, muscle rigidity at the

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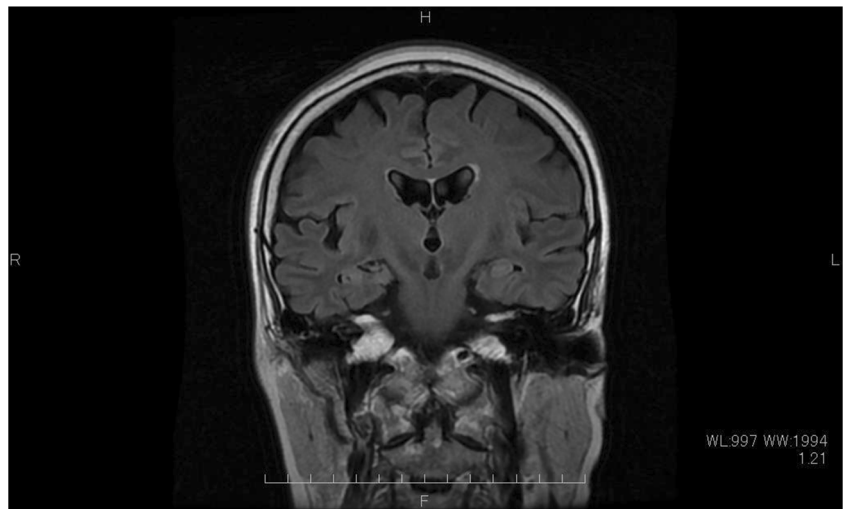
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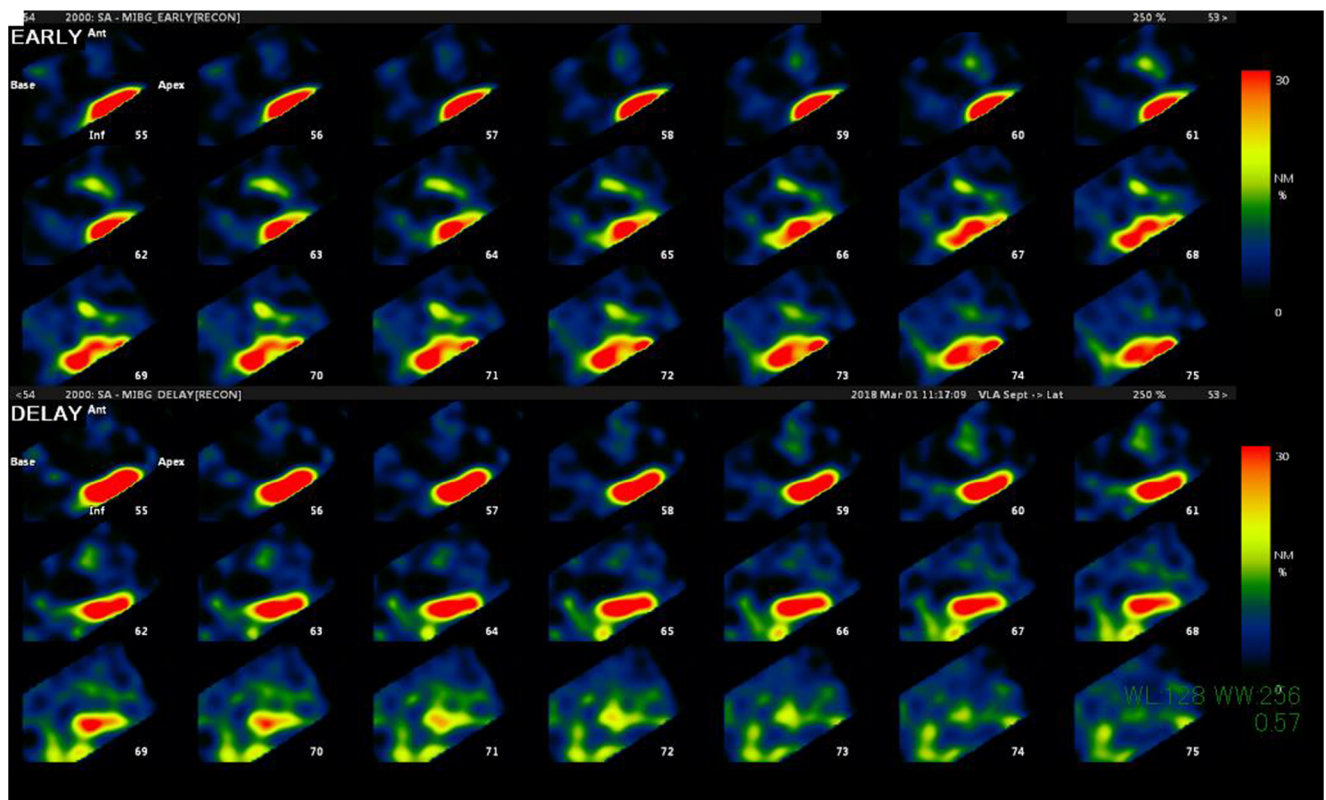
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**Fig. 1** The atrophy of the medial central lobe was not pronounced in MRI



upper and lower limbs, bradykinesia, hypersalivation, postural instability, orthostatic hypotension, constipation, and polyuria. Subsequently, she demonstrated rapid eye movement sleep behavior disorder. We reconsidered her diagnosis and suspected DLB. She retained independence for basic activities of daily living and had no trouble remembering remote past life events; memory problems were restricted to recent events. Her Mini-Mental State Examination score was 27. Magnetic resonance imaging (MRI), single-photon emission computed tomography (SPECT), MIBG scintigraphy, and DAT scans

were performed. The atrophy of the medial central lobe was not pronounced in MRI (Fig. 1). MIBG scintigraphy showed a hypo-accumulation pattern (Fig. 2). Reduced uptake at the lateral basal ganglia was revealed in the DAT scan (Fig. 3). These findings supported the diagnosis of DLB. Perospirone and paroxetine were tapered off, and donepezil was started and increased to 5mg/day. Four weeks later, the oral cenesthopathy, persecutory delusion, depressed mood, and cognitive flexibility were reduced; parkinsonism, however, persisted. Levodopa (75mg/day) was added to the ongoing



**Fig. 2** Hypo-accumulation pattern in MIBG scintigraphy



**Consent to Participate** Consent for participate was obtained from all authors.

**Consent for Publication** Consent for publication was obtained from all authors.

**Competing Interests** All authors declare no competing interests.

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