뇌신경재활

게시일시 및 장소: 10월 19일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

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## Diagnosis of complex regional pain syndrome type 1 in patients with corticobasal degeneration

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Here, we report a corticobasal degeneration (CBD) patient who was also diagnosed as complex regional pain syndrome type I (CRPS I) which resemble each other. A 76-year-old male who was already diagnosed with CBD several years ago presented asymmetric severe pain, postural instability, limb rigidity, limb dystonia, tremor, ideomotor apraxia and bradykinesia especially on his left upper extremity at the admission of the our rehabilitation center. Due to the severe pain with a visual analogue scale (VAS) score between 8~9 of his left upper extremity, he could not transfer well, side lying on the left side at all, and was awoke from his sleep more than 10 times during the night due to severe pain. Additional physical examination showed darker skin color change, edema, reduced skin elasticity, cold skin temperature, wet skin and limited range of motion compared to the right side. Three phase bone scan showed increase of blood flow, blood pool and delayed periarticular uptake in left wrist and hand, and relatively increased bone and joint uptake in left upper extremity, suspicious of typical CRPS I. Therefore, proper treatments including steroid pulse therapies and non-steroidal anti-inflammatory drugs were conducted for managing CRPS I, his left extremity pain reduced from VAS score 8~9 to 3, and his functional level also improved. To the best of our knowledge, this is the first report which the CBD patient who finally also diagnosed as CRPS I. Clinicians should keep in mind of differential diagnosis the CRPS I from CBD because they could have similar clinical features. Also, proper managements based on precise diagnosis are important because these symptoms interrupt the patients' quality of life and activities of daily livings.

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Table I. Changes in Medical Research Council scores of left upper extremity for the patient. Medical Research Council scores are as follows: 0, no contraction; 1, palpable contraction but no visible movement; 2, movement without gravity; 3, movement against gravity; 4, movement against a resistance lower than the

resistance overcome by the healthy side; and 5, movement against a resistance equal to the maximum resistance overcome by the healthy side.

	At admission	After steroid pulse treatment
Shoulder flexors	1	3
Elbow flexors	1	3+
Elbow extensors	1	3+
Wrist extensors	1	3*
Finger flexors	1	3+
Finger abductors	1	3+

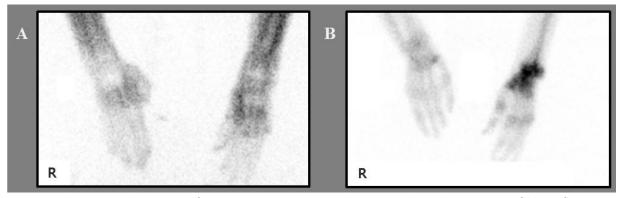


Figure 2. Three phase bone scan of the patient. Three phase bone scan shows the increase of blood flow, blood pool and delayed periarticular uptake in left wrist and hand, and relatively increased bone and joint uptake in left upper extremity, suspicious of typical complex regional pain syndrome. (A) Blood pool phase (B) Delayed phase

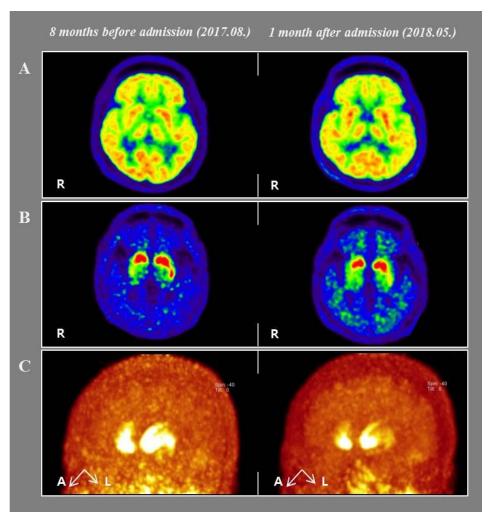


Figure 1. (A) 18F-fluorodeoxyglucose positron emission tomography (PET), (B) 18F-florinated-N-3-fluoropropyl-2- $\beta$ -carboxymethoxy-3- $\beta$ -(4-lodophenyl) nortropane PET, (C) maximum intensity projection images of 18F-florinated-N-3-fluoropropyl-2- $\beta$ -carboxymethoxy-3- $\beta$ -(4-lodophenyl) nortropane PET demonstrating asymmetric decreased FP-CIT uptake in the bilateral posterior putamen (Right > Left) with relative sparing of the ventral putamen, interval aggravated status compared to the previous study conducted 8 months before admission