

## Reduplicative Paramnesia: Dramatic Improvement After Neurosurgical Treatment

*To the Editor:* Reduplicative paramnesia (RP) is a peculiar, uncommon disturbance of memory characterized by a subjective certainty that a familiar place has been duplicated. This syndrome was described for the first time by Pick in 1903<sup>1</sup> and subsequently reported in a variety of neurologic and psychiatric conditions.

### Case Report

The patient was a 72-year-old, left-handed woman. No diseases were recently reported. She was admitted to the neurological department because of her gait problem and "confusional state." A neurological examination revealed only a mild unsteadiness of gait. She was able to provide a coherent history of her hospitalization. Bedside mental status examination was normal, but after only 10 minutes of conversation, she started talking about "her two houses," which she had discovered in the last month: "two identical houses on the same street," she said, "same floor, same furniture;" she had been asking why she found herself having two houses, and she thought maybe the government gave them to her or someone arranged it; however, she acknowledged that she was unable to resolve these contradictions. Her housemaid told us that sometime in the last month, while she was sitting, the patient talked about "the other house" and that she

wanted to go "to her real house." Looking for her dresses in the wardrobe, she said: "I have 10 coats here and another 10 in the other house." CT and MRI exams performed on the first day of hospitalization disclosed a large lesion in the right temporal lobe, enhanced by contrast medium, compatible with large intracranial meningioma with mild mass effect on the lateral right ventricle. Blood exam, ECG, blood pressure, and temperature were normal. On the third day, temporal craniotomy was performed, and the meningioma was completely removed. One day after the operation the patient said: "my mind began to be clean now; maybe I know now I [do not] have two houses." After 1 week, she was able to talk about "the story of the two houses." She did not know why this story had happened to her: "probably it was the tumor in my head," she finally concluded. Neuropsychological testing was obtained after surgery: the patient was alert and collaborative; on MMSE she obtained 29/30, and results were in normal range for the performed tests (digit span, babcock test, and colored raven matrices).

### Discussion

RP has been previously considered as being due to a combination of bilateral frontal lobe and right hemisphere lesions,<sup>2,3</sup> but the specific pathophysiology of the syndrome has not been completely explained, although it has been hypothesized that RP may develop as a result of a temporal lobe lesion disrupting communication between

the visual cortex and both visual processing areas in the inferior temporal lobe and visual memory in the nondominant parahippocampal region.<sup>4</sup> We can hypothesize that reduplication in this patient was related to isolated dysfunction of visuolimbic stream: her house was not "her house" because she had temporarily lost the sense of familiarity for her house, and she could recognize it explicitly, but not implicitly; because she did not "feel" that house as her house; therefore, it must be *another house*, and then *she had two houses*.

The idea of an isolated and temporary dysfunction of visuo- limbic pathways is supported by sudden improvement after neurosurgical treatment for temporal lobe meningioma and by absence of other mental and cognitive symptoms in the anamnestic report and in the neuropsychological examination.

CARMELA GERACE, M.D.

Dept. of Neurology,  
Azienda Ospedaliera  
S. Camillo-Forlanini,  
Rome Italy  
e-mail: cgerace@tisali.it

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