Vaginismus After Epilepsy Surgery

To the Editor: Sexual activity in women with epilepsy,with regard to antiepileptic drug use and reproductive steroids, or the hemispheric localization of epileptogenic foci, is now being debated.[1] Altered sexuality was reported in human and nonhuman studies as an outcome of temporolimbic epilepsy, due to lateralization of epileptic foci.[2] Here, we present a patient who developed vaginismus after left-temporal lobectomy.

Case Report

The patient was a 44-year-old, married woman with two children who developed an inability to have intercourse after surgery for drug-resistant, medial temporal-lobe epilepsy. She had been treated with various antiepileptic drugs for 16 years until surgery was decided on. Her main symptom was difficulty in achieving coitus, which started after the second month of the left anterior-temporal lobectomy (ATL); this has lasted for 1 year, although she has been free from seizures since the surgical operation. Although the patient did not report a decrease in sexual desire after ATL, she described involuntary spasms of the muscles around the vagina, which made penetration virtually impossible, causing a severe, burning pain for both herself and her husband. Her physical, mental, and laboratory examinations were normal.

The treatment regimen, which was levetiracetam 1,000 mg/day and lamotrigine 400mg/day, was unchanged after surgery. After cognitive-behavioral therapy sessions, she was able to achieve penile/vaginal intercourse.

Discussion

Current knowledge leaves open the question of central nervous system (CNS) dysfunction in vaginismus. In a recent study of CNS control mechanisms underlying pelvic-floor functioning in patients with vaginismus, they found hyperexcitable cortical somatosensory evoked-potential recovery cycle and bulbocavernos in vaginismus.[3] The features of sexual dysfunction were suggested to be different among localization-related epilepsy and primary-generalized epilepsy; women with localization-related epilepsy may present with more sexual anxiety, dyspareunia, vaginismus, arousal insufficiency, and sexual dissatisfaction, whereas women with primary, generalized epilepsy experienced more anorgasmia and sexual dissatisfaction.[4] Some studies have documented improvement in sexual function after temporal lobectomy. The postoperative sexual changes were proposed in the majority of the studies in temporal lobe epilepsy. Right-temporal resections were found to be more likely to affect sexual functioning than left-sided resections.[5] Although the above-mentioned studies emphasized the relationship between epilepsy and sexual dysfunction, we could not find any report about postoperative vaginismus-onset in woman with epilepsy. We considered that the postoperative worsening sexual function, that is, having vaginismus symptoms in the current case, might be due to left temporal-lobe resection in the presence of an unchanged drug treatment regimen. However, multiple factors, such as additional brain injury, psychosocial factors, and cognitive and temperamental attributes might be kept in mind in assessing sexual problems after epilepsy surgery. Thus, the relationship between vaginismus and epilepsy surgery deserves to be researched in further studies.

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