

Short Report

Two cases of stuttering responsive to benzodiazepine-based anxiolytics and stellate ganglion block therapy

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Abstract

We report two cases of stuttering that responded temporarily but dramatically to benzodiazepine-based anxiolytics and stellate ganglion block therapy. The patients were a 13-year-old male and a 22-year-old male. In both cases, benzodiazepine-derived anxiolytics were discontinued due to their habit-forming nature. One patient continues to take escitalopram 10 mg/day, while the other is currently under observation with stellate ganglion block therapy alone. These two cases suggest that stuttering can be caused by strong anxiety and tension.

Key words

Stuttering, benzodiazepine derivatives, stellate ganglion block therapy.

Introduction

We have experienced two cases in which benzodiazepine derivatives and stellate ganglion block therapy temporarily but dramatically improved stuttering.

In both cases, it was inferred that underlying anxiety and tension were strong factors contributing to the stuttering. It was hypothesized that alleviating these factors could lead to a reduction in stuttering severity.

The existence of this type of stuttering has been recognized in Western countries for some time; however, due to the strong tendency to avoid habitual use of benzodiazepine-derived anxiolytics

and the rarity of stellate ganglion block therapy in Western countries, these treatment methods were avoided and thus rarely employed in stuttering therapy in Western countries.

Case

Case 1, 7th grade male

Past medical history: No significant findings.

Present medical history: Psychogenic vomiting began in 4th grade. Each time he vomited, his mother was called to school and had to take him home. Around the same time, stuttering began.

He was referred to our hospital. Escitalopram (Lexapro) was initiated. Both psychogenic vomiting and stuttering gradually improved. However, symptoms recurred upon discontinuation of escitalopram (Lexapro).

Additionally, it was discovered that etizolam (Depas), a benzodiazepine-based anxiolytic, was effective. However, its efficacy was limited to a few hours. After learning about the habit-forming nature of benzodiazepine-based anxiolytics online, the mother refused to allow the patient to continue taking etizolam (Depas).

The author referred the patient to a pain clinic where stellate ganglion block therapy is performed, and the patient underwent the therapy. The effect was dramatic. The patient continues to receive stellate ganglion block therapy twice a week. Currently, the patient is attending school without any medication and is completely healthy.

Since there is a tendency for symptoms to recur when stellate ganglion block therapy is discontinued, the patient continues to receive the therapy twice a week.

She continues to take Escitalopram (Lexapro) 10 mg/day.

Case 2, University 2nd year, male

Past medical history: No significant findings.

Current medical history: Noticed stuttering in the first year of high school. Since then, reading aloud in Japanese class became painful, leading to school refusal. However, he managed to graduate with the minimum required attendance.

Upon starting university, he began experiencing bullying. He visited our hospital, where treatment with Escitalopram (Lexapro) 10 mg/day was initiated. He gradually noticed an improvement in his stuttering. He also learned that benzodiazepine-based anxiolytics provided temporary relief for several hours.

However, the patient sought a more effective treatment. He was referred to a pain clinic that performed stellate ganglion block therapy. The effect was dramatic, and the stuttering completely

remitted for about three days after the stellate ganglion block therapy. However, the stuttering recurred after three days, so the patient continues to undergo stellate ganglion block therapy twice a week.

Escitalopram (Lexapro) was discontinued because the patient disliked the sexual dysfunction it caused.

Benzodiazepine-based anxiolytics were discontinued by the author due to concerns about dependency.

Discussion

Stellate ganglion block therapy was widely practiced in Europe and the United States before World War II due to its dramatic effects. However, the use of large, long needles and the placement of the needle at the seventh cervical transverse process led to occasional accidents, including fatalities, resulting in the therapy being largely abandoned in Europe and the United States, where medical malpractice lawsuits are common.

However, around 1975, Wakaki Fumiyo developed a method using a thin, short needle placed at the seventh cervical transverse process, significantly improving safety, and the procedure became widely adopted in Japan. Over half of the treatments performed at pain clinics are now reported to be stellate ganglion block therapy.

Stellate ganglion block therapy is an ancient treatment method that has been reevaluated in the United States for its dramatic efficacy in treating severe post-traumatic stress disorder (PTSD) caused by war. Wakaki Bunji developed a safe stellate ganglion block therapy in Japan, which is now widely used in the country.

In Europe and the United States, it has been known that alprazolam is effective for certain types of stuttering. Alprazolam, due to its anticholinergic effects, can exacerbate stuttering. However, its anxiolytic effects outweigh its anticholinergic effects, resulting in a milder form of stuttering in certain cases.

References

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