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Stuttering treated with olanzapine: a case report

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Introduction. Spasmophemia, also called stuttering or stammering, is a speech disorder characterized by impairment of the rhythm of words whose classical symptoms are blocks and repetitions.

Methodology. We describe the case of a male patient, his evolution and therapeutic strategies and review the current literature on the subject.

Results. A 33-year-old patient was referred to our Mental Health Unit by his family doctor due to "speech problems and difficulty expressing ideas. His symptoms had worsened in recent weeks, with increase in his state of anxiety." Standing out in the consultation to the doctor, the patient experienced multiple blocks in expressing words, using circumlocutions and monosyllabic repetitions that made it very difficult to conduct the interview. Anticipatory anxiety and occasional obsessions of repeated checking also stand out. After six weeks of treatment with olanzapine 5 mg/daily, the patient showed significant improvement both in the fluency and anticipatory anxiety with decreased repetitions, blocking, interjections and broken words.

Discussion. Spasmophemia has been associated with dopaminergic hyperactivity, so that studies have been conducted with atypical antipsychotics. Fundamentally, olanzapine and risperidone have revealed promising results. Furthermore, several studies have shown that these patients have higher rates of anxiety. That is why antidepressants and anti-anxiety drugs such as clomipramine, paroxetine, fluoxetine, citalopram, sertraline and alprazolam have been used.

Conclusion. Treatment with olanzapine, 5HT-2 and D1/D2 antagonist, significantly improved the clinical picture as Boyd et al. have described in their systematic review.

Key words: Spasmophemia, Speech Disorder, Atypical Antipsychotics, Olanzapine

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A propósito de un caso de espasmofemia tratado con olanzapina

Introducción. La espasmofemia, también llamada disfemia o tartamudeo, es un trastorno del habla caracterizado por la alteración del ritmo de las palabras y cuyos síntomas clásicos son los bloqueos y las repeticiones.

Metodología. Se describe el caso clínico de un paciente, su evolución y estrategias terapéuticas, asimismo se revisa la literatura actual acerca del tema.

Resultados. Paciente de 33 años, derivado a nuestra Unidad de Salud Mental por su médico de cabecera al presentar: "problemas de expresión y dificultad para expresar ideas, clínica que ha empeorado en las últimas semanas incrementándose su estado de angustia". En consulta destacan múltiples bloqueos en la emisión del lenguaje con circunloquios y repeticiones monosilábicas que plantean grandes dificultades para realizar la entrevista. Destaca también ansiedad anticipatoria y ocasionales obsesiones de comprobación. Tras seis semanas de tratamiento con olanzapina 5 mg/día, presenta una mejoría significativa tanto en la fluidez, como en la ansiedad anticipatoria con disminución de las repeticiones, bloqueos, interjecciones y palabras entrecortadas.

Discusión. La espasmofemia se ha asociado con una hiperactividad dopaminérgica por lo que se han realizado estudios con antipsicóticos atípicos: fundamentalmente olanzapina y risperidona, que han desvelado resultados prometedores. Por otra parte diversos estudios constatan que estos pacientes presentan índices más altos de ansiedad. Para ello se han empleado fármacos antidepressivos y ansiolíticos como la clomipramina, paroxetina, fluoxetina, citalopram, sertralina y alprazolam.

Conclusión. El tratamiento con olanzapina, antagonista de los receptores 5HT-2 y D1/D2, mejoró significativamente el cuadro clínico tal como han descrito Boyd y cols. en su revisión sistemática.

Palabras clave: Espasmofemia, Trastorno Del Habla, Antipsicóticos Atípicos, Olanzapina

INTRODUCTION

Spasmophemia, also called stuttering or stammering, is a speech disorder characterized by alteration of rhythm of words. Its classic symptoms are blocks and repetitions.

METHODOLOGY

The clinical case of a male patient, his evolution and the therapeutic strategies used are described. The current literature on the subject is reviewed.

RESULTS

No alterations were recorded during pregnancy. He was born by eutocic delivery at term within the hospital setting. He was the second of three siblings. He suffered encopresis until he was 9, there being no other data of psychomotor development alterations. He reports that he spoke words fluently until he was 8, age when he began to stutter, according to him, due to a traumatic living circumstance with his family of origin. At 12 years of age, he received logopedic treatment as well as anxiolytics with low dose bromazepam. However, after one year, as he did not experience subjective improvement, he decided *motu proprio* to discontinue the follow-up. Since then, and as he states, he was a victim of many insults by his classmate. However, he was able to complete his secondary school studies and obtain a diploma in Optics and Optometry. He has worked temporarily as an Optician in several places within the Spanish geographic area. One year ago, he married after seven year of a relationship. Currently, he is 33-years old. He was referred to our Mental Health Unit by his medical practitioner due to "problems of expression and difficulty to express ideas, symptoms that have deteriorated in recent weeks, his state of anxiety increasing." In his visit to the doctor's, multiple blocks in the expression of words with circumlocutions and monosyllabic repetitions stand out. This made it very difficult to carry out the interview. His speech was labored, with frequent pauses that interrupt his rhythmic flow of speech. Also standing out are anticipatory neurovegetative anxiety and occasional obsessions of checking. We contacted the Phoniatriy Unit of our Hospital Complex. This unit recommended anxiolytic treatment as the stuttering of the patient increased on certain situations. An analysis of thyroid hormone, vitamin B12, folic acid, syphilis, HBV, HCV and brain CT scan were requested to rule out any physical condition justifying the picture. No significant abnormalities were found in these tests. Treatment was initiated with clorazepate dipotassium 15 mg/day. Furthermore, the patient began psychotherapy in the Unit based on behavior techniques in relaxation and distraction. After 20 days, there was no clear improvement in his fluency. Therefore, we decided to replace the psychopharmacological treatment by

overlapping to olanzapine 5 mg/day. Six weeks later, the patient showed significant improvement both in fluency and in anticipatory anxiety with decrease of repetitions, blocks, interjections and faltering words.

DISCUSSION

Spasmophemia (307.01, DSM-IV TR) is more frequent in men (75%), and the postulated etiology is multifactorial. It may be caused by physiological factors, such as dopaminergic hyperactivity, linguistic and psychosocial ones. Standing out among these are child traumas and alcoholisms of the parents.¹ Regarding age of appearance, 4 phases have been differentiated: 1) Appearance in pre-school period, the difficulty is episodic and there is high percentage of recovery. 2) It arises in primary school. The disorder is chronic with few intervals of normal speech. 3) It emerges between eight years and beginning of adolescence. The stuttering appears and disappears in response to specific situations. 4) It occasional debuts in adolescence and adult age.² Typical antipsychotics improvement the symptoms of spasmophemia, but that they are associated to adverse effects and poor tolerance.³ Therefore, studies are currently undergoing with atypical antipsychotics, fundamentally with olanzapine and risperidone, that aim to reduce the side effects. These have shown promising results.⁴⁻⁶ This has been seen in the systematic review of Boyd et al. Their study includes the complete remission of spasmophemia of a 4-year old child treated with 0.25 mg/day of risperidone, and the case of a 14-year old adolescent who experienced significant improvement after treatment with 5 mg/day of olanzapine.⁶ On the other hand, several studies have stated that patients with spasmophemia have higher indexes of anxiety due to isolation, intimidation and humiliation experienced.⁷ For this reason, antidepressant and anxiolytic drugs, such as clomipramine, paroxetine, fluoxetine, citalopram, sertraline and alprazolam have been used. Several published studies have found an improvement both in fluency and a decrease in facial movements associated to the use of psychopharmaceuticals.^{8,9}

CONCLUSIONS

In the case of our patient, his disease began in the third evolutive phase of this disorder, in which situation-based fluctuations in speech fluency are characteristic. He also experienced traumas in his childhood and was object of multiple insults, developing anticipatory anxiety symptoms. Regarding treatment with olanzapine, antagonist of 5HT-2 and D1/D2 receptors, the clinical picture improved significantly, as described by Boyd et al. in their systematic review.

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