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Case Report

Adjustment disorder after botulinum toxin injection in an adolescent palatal myoclonus case: The importance of informed consent in the treatment of neuropsychiatric disorders in children and adolescents



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1. Introduction

Informed consent in clinical practice is a process in which a patient consents to participate or undergo the proposed procedures after being informed of its procedures, risks, and benefits. Ideally, the patient is expected to give his/her consent solely after fully understanding the information about the procedures, benefits, and risks involved in the practice. According to the doctrine, the necessary information should be given by the physician and he/she should also respect the decision of the patient which is based on this information. Although the importance of providinginformation about the proposed treatment's effects and side effects to children and adolescents before treatment is accepted by physicians, this issue is given little importance in research and case presentations.² In this case, it was aimed to discuss the importance of informed consent and multi-disciplinary approach in treatment by presenting an adolescent patient who was diagnosed with palatal myoclonus and treated with botulinum toxin. Although the neurological treatment was effective, the patient developed adjustment disorder (with depressive mood) due to dysphonia after the procedure.

2. Case report

A 14-year-old female high school junior, applied to our outpatient department with a complaint of "clicking sounds" in her ears. It was learned from the history that those sounds began one year ago, involved a tinnitus barely noticeable by the patient at first,

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gradually became more intense and culminating in being audible by her peers and family 4-5 months ago. The sounds even prevented her falling asleep. There were no other complaints. Baseline mental status examination was normal and there was no family history of psychopathology. A preliminary diagnosis of palatal myoclonus was made and she was directed to the otolaryngology and neurology outpatient clinic where the final diagnosis of essential palatal myoclonus was corroborated. The patient and her parents were informed about the diagnosis but as learned later, were not informed about treatment options, effects and side effects. After a two-week trial of carbamazepine 200 mg/day without benefit, the patient was injected with botulinum toxin. The botulinum toxin injection helped control palatal myoclonus and clicking sounds. However, she applied again to our department a week after the injection with complaints of "continuous crying, not going to school, lack of sleep, social isolation". It was learned from the history that those complaints started after the injection and that she was unaware of potential side effects of botulinum toxin injection, especially dysphonia. She reported social avoidance due to dysphonia and blamed herself for accepting the treatment. She was hopeless about remission of this side effect and prepared to stay at home for its duration. Evaluation with CGI-S and BDI revealed scores of 4 (moderately impaired) and 12 (mild depressive symptoms); respectively. Mental status examination revealed depressed mood and affect, anhedonia, reduced appetite and sleep. History, mental status examination and psychometric tests supported the diagnosis of adjustment disorder (with depressive mood) according to DSM-IV-TR criteria. Neurology and otolaryngology departments were contacted and detailed information about palatal myoclonus, its treatments and side effects was given. She was reassured that the dysphonia after injectionwill remit within one to two months and sertraline started 50 mg/day. The

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patient was followed with visits every two weeks. Depressive symptoms remitted dramatically at the second week while dysphonia was still continuing. In the meantime she started attending school after a week of rest at home. At the fourth week dysphonia started to reduce and ceased at the 6th week. Sertraline was continued until the 12th week and was gradually tapered thereafter. At the 16th week the patient was free of symptoms. CGI-S and BDI scores were 1 (Normal) and 1 (no depressive symptoms).

3. Discussion

Here we report an adolescent patient who developed adjustment disorder due to adverse effects of botulinum injection to control her palatal myoclonus. Agents including barbiturates, phenytoin, carbamazepine, clonazepam and anticonvulsants/anxiolytics, and sedatives are used in management of palatal myoclonus. Botulinum toxin (BT) treatment is also used. BT acts by preventing release of acetylcholine into the neuromuscular junction and autonomic synapses.³ There have been a few small case series documenting the success and side effects of botulinum toxin injections for treatment of palatal myoclonus. Reported side effects include dysphonia, hypernasality, velopharyngeal insufficiency (VPI) leading to nasopharyngeal regurgitation, dysphagia, and need for repeat injections.4 "Dysphonia" side effect, which our patient perceived as "unexpected and "traumatic", was experienced by her for the first time in school beside her friends and led to avoidance and psychiatric symptoms and complaints because she was not been adequately informed about pre-treatment effects and adverse effects. So she met adjustment disorder (with depressive mood) criteria for DSM-IV-TR. The exact cause of adjustment disorders have not been determined to date, but likely are a result of the interaction of genetics, exposure to stressors, and altered levels of certain chemicals in the brain. One or more stressful life events, a continuous or recurrent stressor, or a stressor associated with a life stage increases the risk that an adjustment disorder will develop.⁵

In the treatment of childhood and adolescent neuropsychiatric disorders, providing information about the treatment options, effects and side effects to the family and the child can improve their participation in the process and can also improve the patient-physician relationship and can increase the compliance. In children and adolescents who are followed up due to medical problems, consultation with child and adolescent psychiatrists may reduce the problems that may be experienced.

Conflict of interest

The authors declared that there is no conflict of interest.

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