

Case Report

Neuroleptic-Induced Persistent "Open Mouth"

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Summary

After prolonged exposure to butyrophenones, a patient with a paranoid psychosis showed an extrapyramidal motor disturbance which, phenomenologically, was very unusual and outlasted the medication. He involuntarily kept his mouth wide open all the time. Reasons for that symptom other than an induction by neuroleptics were not found.

Neuroleptika-induzierter „offenstehender Mund“

Nach Dauermedikation mit Butyrophenonen zeigte sich bei einem Patienten mit paranoider Psychose eine extrapyramidale motorische Störung, die phänomenologisch sehr ungewöhnlich war und auch nach Absetzen des Präparates anhielt. Diesem Patienten stand der Mund unwillkürlich ständig offen. Es wurden keine anderen Gründe für dieses Symptom gefunden als eine Induktion durch die Neuroleptikaeinnahme.

Introduction

Different classification systems have been suggested to categorize extrapyramidal motor disturbances induced by neuroleptics (1, 3). However, it is widely accepted that there are some extrapyramidal syndromes which can outlast the actual treatment by a long time. Parkinsonism is sometimes seen for several months after termination of medication. And hyperkinetic movement disorder, which occur following prolonged exposure to neuroleptics, may be persistent for years or even be irreversible. The latter are mostly referred to as tardive dyskinesia. The reason for assuming that these syndromes are neuroleptic-induced is because of their time course in relation to the treatment, rather than any special phenomenology. The underlying biochemical mechanisms are not exactly known yet (2, 4, 5).

In the authors hospital, a patient showed an extrapyramidal motor disturbance which, in its phenomenology, was very unusual both as regards the known neuroleptic-induced disorders and the spontaneous movement disorders. The disturbance seemed to have been caused by butyrophenones and outlasted the period of medication.

Case Report

A Turkish patient, now 22 years of age, had been living in Germany for seven years. No psychotic or movement disorders had been observed in his family. No medical disorder had been

known in the patient until two years previously, when he presented symptoms of a paranoid-hallucinatory psychosis and was admitted to a psychiatric hospital for three months. Under a medication of bromperidol, promethazine, and biperiden there was a marked improvement, although some psychotic symptoms were persistent. The same medication continued to be given after discharge. Since attempts to withdraw led to an immediate increase in paranoid symptoms and agitation in the patient, his family insisted on adjusting the dosage of medication from day to day. The exact dose of drugs actually taken by the patient during that time is therefore not known. Judging by his statements, the bromperidol dose is likely to have clearly exceeded 10 mg per day, while the biperiden dose varied between 2 and 4 mg per day. After 14 months of such medication, the patient noticed that his mouth was involuntarily wide open most of the time, and that it was difficult for him to keep his mouth closed for more than a few seconds. The patient suffered mainly from the fact that members of his family found the sight of his open mouth very unpleasant. Subsequently, haloperidol was substituted for bromperidol, but without improvement. Because of this problem, the patient was admitted to hospital three months later.

The patient's mouth remained open to the widest possible extent all the time—even during sleep. He was barely able to close his mouth at all in order to speak, eat, or drink. It was sometimes easier for him to close his mouth when touching his cheek with a finger. The strength of the masseter muscle was not reduced. While muscle tone was normal, there was a slight general hypokinesia and hypomimia as a sign of parkinsonism. Aside from that, neurological status was normal. The psychopathologic condition was dominated by paranoid symptoms and emotional indifference. All additional examinations yielded normal results, including an EMG of the mouth-opening and mouth-closing muscles, CAT scan, and MRI. It was possible to exclude an isolated myasthenia gravis pseudoparalytica.

At first, neuroleptic medication was withdrawn and biperiden given at a high dosage. After 12 days, hypokinesia was no longer seen, but there was no change in the "open mouth". Clozapine medication up to 400 mg a day was then started. Within three weeks, psychotic symptoms had disappeared completely, but the "open mouth" was still unchanged. Throughout the whole duration of hospital treatment, a slight tendency to hypersalivation was persistent. Three months after discharge, the patient was still on clozapine and without psychotic symptoms. The "open mouth" was still present, yet it had clearly improved. The patient was keeping his mouth open spontaneously to a lesser extent, he was able to keep his mouth closed most of the time, and he no longer felt impaired by the problem.

Discussion

The patient's "open mouth" occurred after prolonged butyrophenone treatment. Since it persisted even after successful treatment of the patient's psychotic symptoms, it could hardly be seen as a symptom of the psychosis itself. Possible reasons for the symptom other than the treatment with neuroleptics were not found. The "open mouth" outlasted butyrophenone medication by several months, yet it improved markedly when butyrophenones were withdrawn and clopazin given instead. The patient therefore manifested an extrapyramidal disturbance which was neuroleptic-induced. Phenomenologically, it cannot easily be classified among the known extrapyramidal motor syndromes. Certain aspects, however, such as the fact that touching his cheek helped the patient to close his mouth, might suggest the existence of an isolated dystonia, which may be placed in the category of tardive dyskinesia. An individual factor predetermining development of this side-effect may be supposed, although examinations have not provided any definitive evidence of this. Given the 30 years of experience with butyrophenones and the frequency of patients treated with them, the discovery of a disturbance obviously induced by butyrophenones, but still not described in the literature, is surprising.

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