

TONGUE ULCER ARISING IN TARDIVE DYSKINESIA - A CASE REPORT

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حالة نادرة لضعف الحركة المتأخر والمختلطة بقرحة لسانية تم عرضها لمريض كهل نيجيري •
تم تشخيص هذه الحالة على أساس المعلومات الإكلينيكية • إن الحاجة للكشف المبكر لهذا
المرض المزمن من قبل الأطباء تم إظهاره لإحباط ومنع الإختلاطات القومية الوجهية الأكثر شدة
وتم التأكيد على التحويل إلى الطبيب النفسي بالسرعة الممكنة •

A rare case of tardive dyskinesia complicated by a tongue ulcer is reported in an elderly male Nigerian. The diagnosis of this condition is based purely on clinical information. The need for early recognition of this ailment by clinicians is highlighted, in order to forestall more severe orofacial complications. Prompt referral for psychiatric evaluation and intervention is also emphasized.

Introduction

Tardive dyskinesia is one of the voluntary movement disorders occasionally encountered by health care practitioners worldwide. It is known to arise from a blockade of a subset of striatal dopamine receptors. This condition usually occurs as a major complication of long-term administration of neuroleptics with 15 - 20% of such patients eventually developing

¹² this condition.' However, Thomas and McGuire opined that 5% of cases seen occurred in individuals who had not received neuroleptics. These were patients who have been treated with calcium channel blockers, methysergide, reserpine, tricyclic antidepressants, and other antidepressants.

Typically, tardive dyskinesia presents with involuntary or semi-voluntary uncoordinated and repetitive movements

of the orofacial musculature, such as lip-smacking, grimacing, chewing and frequent protrusion of the tongue. ' Consequently, patients afflicted by this condition avoid social gatherings in order to avoid the embarrassment which accompanies such abnormal movements.⁷

Apart from the rarity of tardive dyskinesia with orofacial complications, there are sparse reports in the literature of cases specifically associated with tongue ulcer. The present report is about an elderly male Nigerian who presented with a tongue ulcer as a complication of tardive dyskinesia. To the authors' knowledge, none of such has been documented from subsaharan Africa.

Case Report

A sixty-six year old Nigerian male was presented at the dental hospital, Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria with a two month history of pain from his tongue and excessive salivation. He also complained of unusual

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movements of his facial muscles and tongue of one year duration. He claimed these symptoms were gradually increasing in severity.

There was no history of head trauma or administration of neuroleptics. Past medical history, however, revealed that he was diagnosed with systemic hypertension three years before presentation. He was therefore commenced on a combination of oral *methyl-dopa* 500 mg twice daily, *amlodipin* 10 mg daily and *moduretic* one tablet daily. This was maintained for about nine months although haphazardly. The patient later defaulted for a period of one year, during which he opted for a traditional antihypertensive preparation.

Extraoral examination showed an elderly male with uncoordinated, involuntary movement of the facial muscles. There was drooling of saliva from the right comisure of the mouth. Intraorally, the tongue showed frequent and repetitive protrusive movements. An oval-shaped ulcer measuring 5x4 mm in diameter was observed on the right ventrolateral surface of the tongue. There was evidence of severe attrition of the posterior teeth. A diagnosis of infected traumatic tongue ulcer was made. He was commenced on oral *ampicilin* and *paracetamol*. Additionally, the patient was referred to the psychiatric unit for evaluation of his abnormal facial movements. On presentation at the psychiatric clinic, the attending physician (H.S.A) obtained a history similar to that of the dentist. However, there was associated dysarthria and intense fluctuation of facial movements which ceased while talking. Also the patient said that he felt considerable distress and embarrassment at his abnormal facial gestures. Past psychiatric illness in the patient and family history of mental illness were denied. Before affliction with the disease, he was described

as temperamental, strict and cheerful. Although he had no formal education, he functioned well as a carpenter and family head.

Mental state assessment revealed moody anxiety and abnormal involuntary movements of the facial muscles and tongue. There were no disturbances in the thought, perceptual and cognitive systems. A reasonable level of insight was demonstrated. General physical examination showed no obvious abnormalities. The gait was intact as the neck and limb muscles were unaffected. The blood pressure ranged from 160/80 to 180/110 mm Hg with no evidence of organ involvement. A diagnosis of tardive dyskinesia was subsequently made. He was commenced on *haloperidol* 1.5 mg daily for two weeks, which stepped up to 2.5 mg daily for another six weeks. During a subsequent follow-up visit to the clinic, features of mild depressive episode (ICD -10) were evident. He was therefore commenced on a combination of *amitriptyline* 75 mg nocte and *diazepam* 10 mg nocte. A remarkable improvement was observed one month later not only in the mood but also in the tardive dyskinesia. Meanwhile, periodic monitoring of the patient continued at follow-up appointments.

Discussion

The diagnosis of tardive dyskinesia is made purely on clinical grounds for at present, there are no known investigations to confirm it. The characteristic involuntary or semi-voluntary movements involving the tongue, facial, peri-oral and masticatory muscles wax and wane in its course. This condition is made worse by anxiety and deliberate motor activities. However, it ceases during sleep. This reported case clearly fits a diagnosis of tardive dyskinesia.

despite the negative history of long-term neuroleptic therapy. There is no known effective treatment for tardive dyskinesia, although 50% of cases experience spontaneous remission with discontinuation of medication.⁸ Its prognosis and social consequences have made it mandatory for doctors to obtain informed consent from patients before embarking on long-term course of neuroleptics in some centers.

The affected anatomical region principally concerns the dentist, who may, therefore, be consulted first by the patient with orofacial manifestations of tardive dyskinesia. Hence, it is imperative that dental surgeons recognize this ailment early in its evolution in order to forestall the occurrence of more severe complications.

The actual aetiology of tardive dyskinesia in this patient remains unclear, given the negative history of neuroleptic usage or any evidence of organic brain syndrome. Similar cases have been reported. Perhaps, the presence of other factors such as advancing age, use of a calcium channel blocker and a traditional anti-hypertensive medication may have contributed to the onset of this condition. Traditional anti-hypertensive preparations commonly used in this part of the world have been found to contain reserpine and this is capable of depleting dopamine stores, giving rise to a situation similar to dopamine receptor blockage.

The apparent response of this case to an antidepressant medication is noteworthy, as the relationship between tricyclic antidepressants and extrapyramidal symptoms is complex. Available evidence suggests that *5-hydroxytryptamin* (5-HT) neurotransmitter system maybe involved cannot explain fully the 5-HT dopaminergic interaction. It is also possible that the apparent improvement was due to the usual fluctuation in the intensity of tardive dyskinesia rather than to the therapeutic

effect of the tricyclic antidepressant.

In this patient, tardive dyskinesia was complicated by ulceration of the tongue which became secondarily infected. A plausible explanation for this ulcer maybe the effect of persistent irritation of the spastic tongue by the sharp occlusal margins of the posterior teeth. Caligiuri et al reported a similar complication, although orofacial pain appears to be a much more common dental finding.

In conclusion, it is hoped that through this report, clinicians, especially from subsaharan Africa, will recognize this condition early enough and ensure prompt referral for psychiatric evaluation and intervention.

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