

Status Cataplecticicus Following Abrupt Withdrawal of Clomipramine

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Abstract

Presentation

This is a case of a 31 year old gentleman who suffered an attack of status cataplecticicus following abrupt withdrawal of clomipramine.

Diagnosis

Clomipramine was temporarily discontinued in order to confirm a suspected diagnosis of narcolepsy using Multiple Sleep Latency Testing. This precipitated an episode of status cataplecticicus which resolved with re-introduction of therapy. A diagnosis of narcolepsy was later confirmed with undetectable levels of hypocretin/orexin in the CSF.

Treatment

Re-introduction of clomipramine led to resolution of status cataplecticicus. The patient now remains stable with regards to his cataplexy on clomipramine 30mg.

Discussion

There have been a total of 4 case reports of status cataplecticicus following withdrawal of antidepressant therapy. In all cases, reintroduction of anti-cataplectic therapy led to resolution of attacks. The abrupt discontinuation of an SSRI is believed to precipitate cataplexy attacks due to reduction in noradrenergic tone.

Introduction

Narcolepsy affects approximately 25-50 per 100,000 people worldwide¹. Cataplexy is a common feature, characterised by sudden loss of muscle tone during wakefulness. Narcolepsy with cataplexy affects approximately 0.74 per 100,000 people¹. Narcolepsy is believed to occur due to deficiency of hypocretin/orexin producing neurons in the hypothalamus². Cataplexy is thought to occur due to a sudden loss of noradrenergic tone during wakefulness. Noradrenergic neurons normally inhibit REM-on neurons, which inhibit skeletal motor neurons during REM sleep. In Cataplexy, decreased excitation of these noradrenergic neurons, and subsequent increased activation of REM-on neurons leads to inhibition of skeletal motor neurons resulting in the classic drop attack phenomenon. The amygdala and prefrontal cortex contain pathways through which strong emotions trigger attacks^{3,4}. Status cataplecticicus is defined as cataplexy that occurs repeatedly for hours to days⁵. Abrupt discontinuation of SSRIs may lead to a reduction of noradrenergic tone which precipitates the cataplexy attack⁴.

Case Report

This is a case of a 31-year-old gentleman who suffered an attack of status cataplecticicus following withdrawal of clomipramine. He presented with symptoms that were highly suggestive of narcolepsy with cataplexy. He was experiencing excessive daytime somnolence with an Epworth sleepiness score of 18. He had a clear history of cataplexy triggered by emotional stimuli. He also had a BMI of 25 with possible OSA, which was ruled out with a negative sleep study prior to diagnostic workup for narcolepsy. He had been treated for depression with ecitalopram for over ten

years and prior to presentation had recently been switched to Venlafaxine by his GP, which he felt led to an improvement in his cataplexy. He was experiencing anxiety secondary to venlafaxine use and was switched to clomipramine 30mg which was controlling his cataplexy symptoms well. Nine months after initial presentation, he discontinued clomipramine in order to facilitate MSLT. He suffered multiple episodes of cataplexy, with one episode lasting over one hour. During this time, he also suffered an hour long episode of sleep paralysis. He was immediately re-commenced on clomipramine which led to resolution of these recurrent attacks. As he was no longer a suitable candidate for MSLT, his diagnosis of narcolepsy was subsequently confirmed by LP with undetectable hypocretin/orexin levels in CSF.

Despite adequately controlling cataplexy symptoms, clomipramine was poorly tolerated in this patient due to side effects (urinary hesitancy and ejaculatory dysfunction). An attempt was made to switch from clomipramine to fluoxetine which resulted in recurrence of cataplexy. He is presently stable on clomipramine with regards to his cataplexy despite these side effects.

Discussion

There have been a total of 4 case reports of status cataplecticus following withdrawal of antidepressant therapy. One following an episode of gastroenteritis induced emesis, resulting in abrupt withdrawal of venlafaxine⁴. Three cases have been described following abrupt withdrawal of clomipramine whereby patients have experienced increased frequency, duration and severity of attacks within a week of withdrawal⁵. In all cases, reintroduction of anti-cataplectic therapy led to resolution of attacks. A double blind placebo controlled trial of sodium oxybate allowed for the observation of frequency of cataplexy events following gradual withdrawal of anti-depressant therapy, namely Tricyclic Anti-Depressants (TCAs) and Selective Serotonin Reuptake Inhibitors (SSRIs). The study reported an increase in frequency of cataplexy attacks compared to previously untreated control group. TCAs were associated with an increased number of attacks compared to SSRIs⁶. However, antidepressants are still considered the mainstay of treatment for cataplexy despite scarce evidence supporting their use⁷. In conclusion, due consideration should be given to the possibility of effecting sleep disorders with abrupt discontinuation of antidepressants in any given context.

Conflicts of Interest Statement:

No conflict of interest declared

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