



AMERICAN JOURNAL OF PHARMTECH RESEARCH

Journal home page: <http://www.ajptr.com/>

Fluvoxamine Induced Priapism

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ABSTRACT

Fluvoxamine is an antidepressant which is extremely utilized in our psychiatric practice. Sexual dysfunctions like erectile dysfunction, decreased libido and delayed ejaculation are well known side effects of this drug. However upsetting and painful sexual side effects like Priapism induced by Fluvoxamine has not been reported till yet through any literature. Here we are endeavoring to demonstrate a case of Fluvoxamine induced Priapism.

Keywords: Fluvoxamine, Priapism, Antidepressants.

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Received 30 May 2015, Accepted 06 June 2015

INTRODUCTION

Priapism is a persistent, usually painful, erection of the penis unrelated to sexual arousal or desire for more than 4 hours^{1,2}. Priapism of the clitoris has been accounted for yet is greatly uncommon.¹ At least 95% of all cases of priapism occur by an ischaemic (low-flow or veno-occlusive) mechanism. Ischaemic priapism is a type of compartment syndrome where pressure within the corpora cavernosa severely compromises circulation in the cavernous tissues². Priapism is a true urologic emergency that may lead to permanent erectile dysfunction and penile necrosis if left untreated¹. Priapism ought to be medically evaluated and requires immediate medical intervention¹. Medical conditions like Leukemia, Thalassemia, Sickcell anaemia are well known to cause priapism³. Amongst the Drugs bringing about priapism are predominantly, antihypertensive like prazosin, anticoagulants like heparin and so on³. Medicinal profiles of psychotropics likewise uncover that they are additionally known to cause prolong and sustained erection of penis⁴. Chlorpromazine, Clozapine, Trazodone, Fluoxetine may bring about priapism⁴. Vascular mechanism like Alpha 1 receptor blockade by these medications play crucial role in priapism^{1,4}. Milan et al. and Simon et al. had reported serotonin mediated erection of penile erection in rats by stimulating 5HT1c and 5HT2c receptors^{5,6}. Sexual dysfunctions like erectile dysfunction, decreased libido and delayed ejaculation are surely understood symptoms of Fluvoxamine.⁶ However distressing and painful sexual side effects like Priapism induced by Fluvoxamine has not been reported till yet through any literature.. Here we are reporting a case of Fluvoxamine induced priapism who attended our OPD during his treatment of depression.

Case History

A 55 yrs Hindu, male presented to us with painful and sustained erection of penis for last one day. While auditing his medicinal records it had been observed that he was diagnosed case of major depressive disorder for the last 1 month. He was on tablet Fluvoxamine 150 mg/day. The patient had reported improvement in his symptoms after consumption of the drug for the last 1 month. But recently he had developed sustained and painful erection of his penis. Immediately following that he had attended nearby local hospital. But the medicine specialist had ruled out the possibilities of medical conditions associated with sustained and painful erection of penis. Later he was referred to our OPD as he was under the coverage of psychotropic drugs. His past history additionally had not uncovered any variation from the norm. His physical and local examination penis didn't reveal any abnormality except hard and erected and painful penis. Baseline investigations were performed and found to be within normal. Eventually he was diagnosed to be a case of Priapism, possibly due to

Fluvoxamine. The offender medication had been stopped. Following 1 day of the stoppage of the medication his penis began to decrease to its flaccid state. Later on tablet Escitalopram 20 mg was started and the patient was keeping up well in his consequent visit.

RESULTS AND DISCUSSION

Drug induced priapism is an extremely usual phenomenon with drugs like Papaverine, alprostadil, alcohol, heroin, heparin, prazosin etc⁴. Among psychotropics drugs like Chlorpromazine, clozapine and sodium valproate are well known for their undesirable sexual side effects like priapism^{2,4,8}. Antidepressants like Fluoxetine, Trazodone, might likewise bring about Priapism⁹. Hoffmann et al. reported a case of Trazodone induced priapism in a 35 years old man, for which penile amputation had to be done.⁹ Similar case was reported by Correase et al. in a 41 year old male.¹⁰ We have applied Naranjo Adverse Drug Reaction probability scale¹¹ to quantify the degree of association between Fluvoxamine and priapism and it was found to be 8. Alpha adrenergic receptor blocking action by this antidepressant plays a crucial role in causing prolonged penile erection as reported by various studies¹. Milan et al. and Simon et al. has proposed serotonin mediated penile erection in rats^{5,6}. In our case, as Fluvoxamine is devoid of alpha mediated receptor blockage action, serotonin mediated stimulation of 5HT1c and 5HT2c receptors may be playing an important role as reported by previous studies^{1,7}. Earlier reports demonstrating Fluvoxamine mediated Priapism has not been found, which were searched manually and through web. Here we recommend a well designed case control study to uncover a clear link between Fluvoxamine and this distressing sexual side effect.

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