Methylphenidate for the Treatment of Erectile Dysfunction Induced By Long Acting Injectable Paliperidone Palmitate: A Case Report

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ABSTRACT:
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Erectile dysfunction is one of the common sexual adverse effects encountered in male patients treated with antipsychotics. It is associated with prolactin secretion secondary to dopamine antagonism by the antipsychotics. Methylphenidate is a psychostimulant that inhibits the reuptake of dopamine. In this case, we report a 42 year old schizophrenic male, who developed erectile dysfunction after administration of a long acting injectable antipsychotic, namely paliperidone palmitate. The erectile dysfunction did not respond to sildenafil but recovered with the treatment of methylphenidate 10mg. The current finding suggests that clinicians should be aware of the possible emergence of erectile dysfunction among patients on long acting injectable antipsychotics. Methylphenidate may be an alternative treatment option for erectile dysfunction induced by antipsychotics.

Keywords: erectile dysfunction, paliperidone, methylphenidate, sexual dysfunction

Bulletin of Clinical Psychopharmacology 2013;23(4):361-4

INTRODUCTION

There is often a lack of attention among clinicians on the issue of sexual dysfunction related to antipsychotics. This may be based on the notion that schizophrenic patients have difficulty in maintaining relationships and therefore the issue of sexual dysfunction will not be a concern (1). However, with the emergence of newer antipsychotic agents with better efficacy and minimal extrapyramidal adverse effects, most schizophrenic patients are able to return to society and start their own family. Among male patients, erectile dysfunction (ED) has been documented with the use of the first and new generation of antipsychotics (2). There have also been reports of cases of galactorrhea and breast engorgement which are the result of prolactin secretion secondary to the dopamine antagonist effect at the pituitary gland. The International Index of Erectile Function (IIEF) is a commonly used self-rated tool for assessment of male sexual dysfunction (3). The abbreviated version, IIEF-5, has been developed as a diagnostic tool for ED to complement clinical judgment (4).

Sildenafil citrate was introduced in 1990’s for the treatment of erectile dysfunction. Sildenafil is a potent and selective inhibitor of cGMP-specific phosphodiesterase type 5 (PDE5). Increased cGMP leads to smooth muscle relaxation (vasodilation) of