

Research Article

# Pharmacotherapy for Obsessive-Compulsive Disorder an Educational Article

Aamir Jalal Al-Mosawi\*

Department of Psychiatry, Children Teaching Hospital, Baghdad Medical City, Iraq.

**Corresponding Author:** Aamir Jalal Al-Mosawi.  
Department of Psychiatry, Children Teaching Hospital, Baghdad Medical City, Iraq.

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## Abstract

**Background:** Various medications have been used in the treatment of obsessive-compulsive disorder during the 1960s including imipramine (A tricyclic antidepressant), benzodiazepines including oxazepam, and lithium. However, clomipramine has been increasingly used during the 1970s. (A tricyclic antidepressant). However, more than 20% of patients with obsessive-compulsive disorder continue to represent a therapeutic challenge for the treating physicians. Selective serotonin reuptake inhibitors have become an integral part of pharmacotherapies for obsessive-compulsive disorder, and the addition of low dose neuroleptic has been increasingly suggested when treating difficult cases.

**Patients and Methods:** The case of a 24-year old female with obsessive compulsive disorder who didn't respond to several medication is presented, and the evidence-based therapeutic approach to such case is discussed.

**Results:** The patient started experiencing the obsessions before about few months during the year 2023, and the obsessions resulted in excessive cleaning as the main compulsion. The illness was complicated with symptoms of anxiety and depression. The patient was treated with multiple medications for only short periods because of intolerance and the development of a variety of unwanted side effects including headaches and tremor. Medications included oral deanxit (Flupentixol plus melitracen), oral olanzapine, oral clonazepam, imipramine (Tofranil), oral paroxetine, oral Escitalopram, oral levetiracetam.

Therefore, the patient was treated according to the available evidence with oral citalopram 20 mg daily plus oral risperidone in an initial dose of 1 mg at night, to be gradually increasing to 2 mg depending on the occurrence of excessive drowsiness. Ondansetron was also given in an initial dose of 4 mg daily in the morning, to be gradually increasing to 8 mg based depending on the occurrence of unwanted gastrointestinal symptoms. Celecoxib was given in an initial dose of 200 mg daily in the morning with possible increase in dose if necessary.

**Conclusion:** The current evidence-based expert opinion suggests that difficult cases of obsessive-compulsive disorder that are commonly associated with medication intolerance can be treated with relatively low doses of citalopram plus risperidone plus ondansetron plus Celecoxib. If adequate response is not obtained, lamotrigine can be added with gradually withdrawing ondansetron and Celecoxib.

**Keywords:** Pharmacotherapy, Tricyclic Antidepressant, Benzodiazepines, Tofranil and Celecoxib

## 1. Introduction

Obsessive compulsive disorder is a psychiatric condition that impairs the quality of life because of its association with obsessions (Persistent irresistible unwanted thoughts such as fear of contamination) that produce compulsions (Desire to perform certain routines such as excessive hand washing and cleaning repeatedly) to alleviate anxiety, disgust or the distress resulting from the obsessions.

The disorder was mentioned in the medical literature as early as the 1800s. In the 1838, Jean Etienne Dominique Esquirol (Figure-1) described Obsessive compulsive disorder in his psychiatric textbook and considered it to be as a type of monomania, or partial insanity.



**Figure 1:** Jean-Etienne Dominique Esquirol (3 February 1772 -12 December 1840), a French Psychiatrist

Various medications have been used in the treatment of this condition during the 1960s including imipramine (A tricyclic antidepressant), benzodiazepines including oxazepam, and lithium. However, clomipramine has been increasingly used during the 1970s. (A tricyclic antidepressant) [1-5].

### Patients and Methods

The case of a 24-year old female with obsessive compulsive disorder who didn't respond to several medication is presented and the evidence-based therapeutic approach to such case is discussed.

### 3. Results

The patient started experiencing the obsessions before about few months during the year 2023, and the obsessions resulted in excessive cleaning as the main compulsion.

The illness was complicated with symptoms of anxiety and depression. Apart from recurrent headaches that received the diagnosis of migraine, the patient was considered otherwise healthy.

The patient was treated with multiple medications for only short periods because of medication intolerance and the development of a variety of unwanted side effects including headaches and tremor. Medications included oral deanxit (Flupentixol 0.5 mg plus melitracen 10 mg), oral olanzapine 3 mg, oral clonazepam 0.5mg, imipramine (Tofranil) 25 mg, oral paroxetine, oral Escitalopram (Cipralext) 20 mg, and oral levetiracetam (Keppra).

Therefore, the patient was treated with oral citalopram 20 mg daily based on the evidence provided by Thomsen [6-9]. Citalopram was given at 1pm to avoid the possibility of excessive drowsiness or sedation in the morning or insomnia at night.

The patient was also given oral risperidone in an initial dose of 1 mg at night, to be gradually increasing to 2 mg depending on the occurrence of excessive drowsiness. The use of risperidone based on the evidence provided by Jacobsen [10-14].

idone based on the evidence provided by Jacobsen [10-14].

Ondansetron was given in an initial dose of 4 mg daily in the morning, to be gradually increasing to 8 mg based depending on the occurrence of unwanted gastrointestinal symptoms. The use of ondansetron was based on the evidence provided by [15].

Celecoxib in an initial dose of 200 mg daily in the morning with possible increase in dose if necessary [16].

### 4. Discussion

More than 20% of patients with obsessive-compulsive disorder continue to represent a therapeutic challenge for the treating physicians. Selective serotonin reuptake inhibitors have become an integral part of pharmacotherapies for obsessive-compulsive disorder, and the addition of low dose neuroleptic has been increasingly suggested when treating difficult cases.

Of the five serotonin reuptake inhibitors including citalopram, fluoxetine, fluvoxamine, paroxetine, and sertraline that were used for use in obsessive-compulsive disorder; Citalopram is most probably the selective serotonin reuptake inhibitors that is associated with least possibility of the occurrence of side effects. Risperidone seems to be the neuroleptic that is most probably associated with least occurrence of side effects in a relatively low dose [6-14].

Many of the medications the patient received in this paper for the treatment of obsessive-compulsive disorder including flupentixol, melitracen, and levetiracetam were used without acceptable supporting scientific evidence. In fact, levetiracetam, an antiepileptic medication has been reported to be associated with several psychiatric adverse effects including obsessive compulsive behavior [17].

In 2003, Mukaddes and colleagues from Turkey reported a study which included 15 children and adolescence (9 males and 6 females) who had obsessive compulsive disorder and treated with oral citalopram 20-30 mg/day for eight weeks. Treatment was associated with improvement in 14 patients. Side effects occurred during the first week and included sedation in one patient and insomnia in one patient [9].

The use of lamotrigine to enhance the therapeutic response to serotonin re-uptake inhibitors and clomipramine in difficult cases obsessive-compulsive disorder has been increasingly reported [18-21].

In 2012, Antonio Bruno from Italy and his research group reported a 16-week placebo-controlled study which showed that the addition of oral lamotrigine 100 mg daily to serotonin reuptake inhibitors used for treating obsessive-compulsive disorder can significantly improve the therapeutic response. According to Antonio Bruno from Italy and his research group the addition of lamotrigine was well tolerated [20-22].

## 5. Conclusion

The current evidence-based expert opinion suggests that difficult cases of obsessive-compulsive disorder that are commonly associated with medication intolerance can be treated with relatively low doses of citalopram plus risperidone plus ondansetron plus Celecoxib. If adequate response is not obtained, lamotrigine can be added with gradually withdrawing ondansetron and Celecoxib.

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The figure included in this paper was included in the author's previous publication, but the author has its copyright.

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