

# Major Depression in a Brazilian Amazon Woman with Down Syndrome: A Case Report

D Castelo de Souza, L Meguins, E Meguins

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## Abstract

We report on a 28 years-old woman with Down syndrome and moderate intellectual disability that was referred to us with a 1-month history of progressive change from being cheerful and cooperative to becoming socially withdrawn, tearful, apathetic and disinterested in activities. She had also shown behavioral deterioration with loss of adaptive skills. Her appetite decreased, leading to a 10 kg weight loss, and she developed initial insomnia. The patient was treated with fluoxetine at 20 mg each day. She made a complete recovery over one month, and 15 months after the beginning of pharmacologic therapy, continued to be free of depressive symptoms. Although major depression is not commonly associated with Down's syndrome, the diagnosis of this mood disorder must be considered when alterations of vegetative functions and activity are observed.

## INTRODUCTION

Depression is a widespread disease with substantial morbidity and mortality. In Brazil, it affects 24.5% of patients with general medical disease ( <sub>1</sub> ) and represents 78.5% of all psychiatric consultations ( <sub>2</sub> ). However, affective and mood disorders of people with intellectual disability, especially major depression, have been rarely described in the literature ( <sub>3</sub> ).

The aim of this report is to describe the clinical characteristics and therapeutic management of a Brazilian Amazon woman with Down syndrome and moderate intellectual disability who had been identified to have major depression.

## CASE REPORT

A 28 year-old woman with Down syndrome and moderate intellectual disability, born and residing in the Brazilian Amazon region, was referred to the Department of Psychiatry. She had episodes of irritability associated with headache and a 1-month history of progressive change from being cheerful and cooperative to becoming socially withdrawn, tearful, apathetic, and disinterested in activities. She had also shown behavioral deterioration with loss of adaptive skills such that she was no longer able to bathe, dress, or feed herself. Her appetite decreased, leading to a 10 kg weight loss, and she developed initial insomnia with poor and restless sleep. There were no thoughts of death or

suicidal ideation. There was no family history of psychiatric illness. Biochemical blood exams, electroencephalogram (EEG), and thyroid function tests were normal.

As no other structural abnormality was found and as clinical symptoms met virtually the Diagnostic and Statistical Manual of Mental Disorders criteria, fourth edition (DSM-IV) ( <sub>4</sub> ), for a major depressive episode, the mood disorder was attributed to it and a diagnosis of major depressive disorder was suspected by a physician from the Department of Genetics where the patient had been followed. The clinical assessment by an experienced psychiatrist also confirmed this suspected diagnosis. No formal interview with the patient was performed due to the poor verbalizing ability of the patient. Based on this diagnosis the patient was treated with fluoxetine at 20 mg each day. She made a complete recovery over one month, regaining her premorbid skills, activities, appetite, and weight. Her sleeping normalized. Follow-up was uneventful and 15 months after the beginning of pharmacologic therapy, the patient continued to be completely free of depressive symptoms.

## DISCUSSION

Major depressive disorder is a heterogeneous illness with an extremely variable course, a fickle response to therapy, and no established underlying mechanism ( <sub>56</sub> ). This mood disturbance is characterized by sadness and irritability associated with several psychophysiological changes, such as loss of the ability to experience interest or pleasure in all

or almost all activities, disturbance in sleep or appetite, crying, death ideation and suicidal thoughts, and a decrease in concentration. These changes must last a minimum of 2 weeks and interfere considerably in a patient's quality of life (45).

Depressive episodes represent the highest incidence of mental illness among individuals with intellectual and developmental disabilities (7). According to Hurley (2008) (8), sad mood, crying, and anhedonia are key significant features of depression among patients with intellectual disability and are helpful in differentiating depressed patients from those with bipolar or anxiety disorders. However, mental illness is less prevalent in adults with Down syndrome than for other adults with intellectual disability (7). Patients with Down syndrome and comorbid major depressive disorder usually present with withdrawal, apathy, irritability, increased dependency, and somatic complaints, instead of depressed mood (91011). Verbal expression of preoccupation, for example of suicidal ideation, death, self-depreciation, and guilt, are also observed in some patients with intellectual disability and may make physicians aware of the clinical suspicion of major depressive disorder (121314). However, when verbal expression is poor, a diagnosis rests mainly on the observation of activity and vegetative functions with information obtained by observers and caregivers who know the individual well (310). Although our patient did not verbalize any depressive symptoms, the mother of the patient reported that her daughter had marked social withdrawal and failed to participate in activities known previously to bring pleasure. According to Myers et al. (1995) (3), these symptoms must be interpreted as loss of interest and pleasure.

The therapeutic approach for patients with Down syndrome and major depressive disorder commonly involves the use of antidepressant agents. The most frequent classes of drugs used with good response are tricyclic antidepressants and serotonin selective reuptake inhibitors (3).

Electroconvulsive therapy is also an effective therapy that can be used in medication-resistant patients (31015). In the present case, treatment with fluoxetine led to complete recovery of the patient to her previous euthymic mood without any side effects.

In conclusion, this case reinforces that diagnosis of major depressive disorder in patients with Down syndrome is often difficult due to intellectual deficits that limit the extent of the

psychopathology. However, observation of activity and vegetative functions may help the diagnosis of this affective disorder. Diagnosis is the first step leading to a successful treatment and concomitant improvement in a patient's quality of life.

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### CORRESPONDENCE TO

Lucas Crociati Meguins Pass. São Cristóvão, 11 Guamá, Belém, Pará Brazil. Postal Code: 66065-670 Brazil Phone: + 55 91 81838107 Fax: + 55 91 32522312 e-mail: lucascrociati@libero.it

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**Author Information**

**Dárcio Marcel Castelo de Souza, MD**

Psychiatry Department, Hospital Universitário Bettina Ferro de Souza

**Lucas Crociati Meguins**

Health Science Institute, Faculty of Medicine, Universidade Federal do Pará

**Emília Maíra Crociati Meguins**

Health Science Institute, Faculty of Nursing, Universidade Federal do Pará