CASE REPORTS

Between Obsessive-Compulsive Disorder and Psychosis

Entre a Perturbação Obsessivo-Compulsiva e a Psicose

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ABSTRACT

Introduction: Obsessive-compulsive disorder is an heterogeneous condition in which periods of altered perception or delusions may arise. Similarly, individuals with psychotic disorders may have obsessive-compulsive symptoms.

Case report: A male adolescent presented to the Emergency Department (ED) with obsessive symptomatology with three months of evolution. Three weeks later, he returned to the ED showing symptom worsening and reporting delusions, being admitted to the inpatient unit to clarify the diagnosis. No positive symptoms were reported during hospitalization. During follow-up, the patient reported an episode of apparent delusional perception that he associated with the beginning of symptoms, again raising the question of whether a psychotic episode was present.

Discussion/Conclusions: The distinction between obsessive-compulsive disorder and psychosis is not always clear, with obsessive-compulsive disorder being a significant comorbidity in patients with a first psychotic episode. Close patient assessment is required for early diagnosis and appropriate intervention.

Keywords: adolescent; obsessive-compulsive disorder; psychosis

RESUMO

Introdução: A perturbação obsessivo-compulsiva é uma patologia heterogénea em que podem surgir períodos de perceção alterada ou ideias delirantes. De igual forma, indivíduos com perturbações psicóticas podem apresentar sintomas obsessivo-compulsivos.

Caso clínico: Um adolescente do sexo masculino recorreu ao Serviço de Urgência (SE) por sintomatologia obsessiva com três meses de evolução. Regressou ao SE após três semanas por agravamento do quadro e relato de ideias delirantes, tendo sido internado para clarificação do diagnóstico. Nunca foram objetivados sintomas positivos durante o internamento. Em consulta de seguimento, o jovem relatou um episódio de aparente perceção delirante que associou ao início da sintomatologia, levantando novamente a dúvida quanto à presença de um episódio psicótico.

Discussão/Conclusões: A distinção entre perturbação obsessivo-compulsiva e psicose nem sempre é clara, e a comorbilidade entre ambas é significativa. É necessária uma avaliação meticulosa do doente para um diagnóstico precoce e intervenção apropriada.

Palavras-chave: adolescência; perturbação obsessivo-compulsiva; psicose

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INTRODUCTION

Obsessive-compulsive disorder (OCD) is a common, often chronic, disorder in children and adolescents, with significantly associated impairment across multiple functioning domains.[1]

According to Fontenelle *et al.*, OCD has been increasingly recognized as comorbid with different types of psychotic disorders. The prevalence of OCD in individuals with psychotic conditions ranges between 10% and 25%, which is more than eight times that reported for OCD in the general population.[2] Such comorbidity is clinically relevant, as OCD may modify the clinical expression of other disorders.[2]

OCD is characterized by the presence of obsessions and/or compulsions with varying severity. Patients recognize that those behaviors are excessive and unreasonable at some level, although this understanding is not required for OCD diagnosis in children and young people, who may present solely with compulsions. The usual onset of the full disorder takes place during adolescence or young adulthood, with slightly earlier onset in males compared to females.[3]

OCD as comorbidity represents an extra burden to patients suffering from psychotic disorders.[4] Patients with schizophrenia and OCD have been reported to have earlier-onset psychosis, an increased rate of depressive symptoms, and suicidal attempts compared to their non-OCD counterparts. However, these patterns have not been consistently reported.[4]

There are several possible explanations to why OCD and schizophrenia might be related, namely the hypotheses that one disorder may present as a prodrome of the other or one disorder may cause the other.[5]

The aim of this report was to describe the case of a 14-year-old male presenting with OCD and psychotic symptomatology with a yet unclear diagnosis and reflect on the difficulties in the management and treatment of these cases.

CASE REPORT

Chief complaint and history of present illness. A 14-year-old Caucasian male was admitted to the Pediatric Psychiatric Emergency Department (PPED) complaining of initial insomnia, obsessive thoughts, and repetitive behavior. He appeared to be very worried and reported persistent intrusive thoughts of self-criticism and fear of unintentionally insulting or hurting people. The boy reported rituals such as washing hands several times a day for fear of contamination and questioning his parents for reassuring his persistent doubt, and was very scared of dying. In addition, he showed progressive symptom worsening and declining school performance. Sertraline 50 mg and risperidone 0.5 mg were prescribed in the PPED, and a reassessment follow-up appointment was scheduled for four weeks later.

Three weeks later, the patient returned to the PPED with symptom worsening. He was fearful, increasingly unable to function independently, and unable to attend school. He presented alterations of thought content, verbalizing persistent doubts about being *"in another world"* and not being sure whether his parents *"were really themselves"*, and was becoming more socially isolated and distant from family and friends.

The boy had suffered a decline in overall functioning, particularly in school, over the past three months and was proposed a Child Psychiatry inpatient evaluation in the second PPED presentation, which he and his parents accepted.

Past medical, developmental, and family history. The patient's developmental history was described as expected for age. At four years, he had a two-month period of compulsive hand washing that resolved after a short period of psychotherapy. Both parents had a history of anxious symptomatology and were medicated. No history of major mental illness was identified in the close family. The boy denied smoking, taking any toxic drugs, and alcohol consumption.

Mental status. The patient presented with poor mood, anxiety, and easy crying. He engaged reasonably well in the evaluation, with fluent speech but not very organized thought, jumping back and forth in temporal events. It was unclear whether that was due to anxiety or general thought disorganization. He described persistent obsessive thoughts and doubts about family wellbeing and fear of unwittingly hurting family members, doing something illegal, or insulting someone. To prevent this, he completed rituals, like always drinking from the same side of the glass, counting steps, constantly praying, and avoiding situations he perceived as triggers (e.g., going to the church). These were interpreted as obsessive thoughts with compulsions. Additionally, he doubted whether his parents were really themselves, saying they could be aliens from another planet. These behaviors were interpreted as possible delusions. The boy also doubted about the possession of his thoughts: he had visited a psychologist some days earlier, who calmed him down with a head massage, after which he became afraid that the psychologist had *"stolen his mental capacities"*. This could also represent a psychotic symptom (abnormality of thought possession). He displayed no signs of aggressiveness but showed significant distress about having aggressive thoughts and potentially hurting others. He was partially aware of his situation. Auditory or visual hallucinations were ruled out, as well as suicidal ideation. In addition, he had initial or intermediate insomnia and diminished appetite.

Hospital presentation and differential diagnosis. On admission, the patient was very anxious, sad, and tearful. He had reasonable overall functioning and presented several long-lasting repetitive behaviors. He still mentioned doubts about his parents really being themselves and about the staff in the unit being real. He had some insight about his doubts, acknowledging that they did not "*make much sense*". At this point, OCD versus a psychotic disorder were the primary

differential diagnoses.

Delirium or an organic etiology was ruled out based on normal routine laboratory exams and magnetic resonance imaging. The presence of toxic substances was not investigated, as there was no history of use.

Targeting an OCD diagnosis, sertraline dose was optimized, risperidone was discontinued, and olanzapine and lorazepam were introduced to improve insomnia and anxiety.

The patient was submitted to psychological evaluation under the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), which identified "several obsessions and compulsions, namely thoughts of aggression, violence, sexual and religious nature, verification, contamination/cleanliness, and a range of superstitious behaviors and intrusion of sounds (...)."

By the end of the second week, the patient was much less anxious, maintaining less frequent and intense rituals. His mood was brighter, and he seemed less worried and fearful. At that time, he showed no positive symptoms. The patient was discharged on day 16. He was diagnosed with F42.2. Obsessive-compulsive Disorder with mixed obsessional thoughts and acts (according to ICD-10).[6]

Discharge plans and follow-up. The patient was referred to the outpatient unit of the Pediatric Psychiatric Department within a week, maintaining the treatment plan. He was also referred to Psychology consultation for OCD treatment, using a cognitive-behavioral approach for symptom reduction. An ongoing care plan was established and agreed upon based on close collaboration among the outpatient provider, the patient, and the patient's family.

During follow-up, the boy reported an episode that he associated with the beginning of symptoms: he attributed the proof of the existence of a "*parallel reality*" to the triangle symbol. After this, he became very anxious when seeing a triangle, fearing that "*something bad would happen*", and tried to mitigate anxiety with repetitive behaviors. At the same time, he was afraid of "*doing something bad*" to others or being in contact with certain materials (like gasoline, bleach, etc.) for fear of contamination. He had partial insight but could not help performing those repetitive behaviors to calm down.

Subsequently, the boy expressed doubts about the existence of extraterrestrials and their ability to oversee the actions of humans, which were accompanied by marked anxiety. These bizarre and paranoid ideas again raised the question of whether a psychotic disorder could also be present. Doubts were also raised about whether the boy's inability to attend school was due to high anxiety or cognitive deterioration caused by a psychotic state.

With therapeutic adjustment, the boy started showing increasing insight. Symptoms still had an impact on functioning, mainly through difficulty in thinking and organizing tasks, but he was able to attend school and concentrate better.

Persistent pathological doubt is the landmark of OCD. However, the presence of bizarre and paranoid thoughts makes it unclear whether standing before an isolated case of OCD or also the beginning of a psychotic state.

DISCUSSION

OCD is a condition with several possible presentations, including occasionally a seemingly psychotic nature, in which periods of altered perception or delusions arise.[3] The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) encompasses the OCD diagnostic specifier "*without insight/with delusional beliefs*", which may be useful in these case presentations.[7] However, when an adolescent reports OCD symptoms, clinicians should fully explore the symptomatic picture, as subthreshold psychotic symptoms may be lingering underneath, thereby contributing to increased clinical and functional impairment.[5]

Regarding insight, Selles *et al.* studied an OCD youth sample in which almost 90% of patients reported excellent, good, and fair levels of insight.[8] A small group of patients (9.7%) was in the poor insight group, and very few (1.4%) were in the absent/delusional insight group. The poor/absent insight group was associated with higher OCD severity levels, specifically increased distress and avoidance and decreased symptom resistance.[8]

When differentiating between OCD and schizophrenia spectrum disorders (SSDs), Rodowski *et al.* suggested four areas of evidence that can help elucidate this distinction. The authors included prevalence data, past history and clinical presentation, presence/lack of insight of the connection between a thought and behavior, and long-term follow-up to assess the natural course of the disease.[3] In the present case, prevalence data suggested that OCD is the primary diagnosis, with past history also corroborating this hypothesis. The clinical presentation remained a confounding factor, and insight was compromised by delusional beliefs. The patient's long-term follow-up will be of utmost importance to determine the outcome.

One important aspect is how symptoms are phenomenologically interpreted. Oulis *et al.* put forward an approach suggesting a comparative assessment of major features of obsessions versus delusions and compulsions versus delusional repetitive behaviors to make an accurate differential diagnosis between OCD and SSDs when that is challenging.[9]

Despite efforts to distinguish OCD and schizophrenia, the conditions may indeed co-occur. This comorbidity has been explained by three main theories summarized by Rosli *et al.*: OCD can be a prodrome of schizophrenia; OCD can be a risk factor for schizophrenia; or both are to be taken as having a common risk factor (vulnerability genes).[10] This led to the term "schizo-obsessiveness", coined by Hwang and Opler in 1994 and proposed in some cases.[11] OCD-schizophrenia spectrum disorders include OCD, OCD with poor insight, OCD with schizotypal personality disorder, schizophrenia with obsessive-compulsive symptoms, schizophrenia with OCD, and pure schizophrenia.[12]

Faragian and colleagues reported that almost half of obsessive-compulsive symptoms (OCS) reported by schizo-obsessive patients

precede the first psychotic symptoms (PS), while OCS followed PS in only a quarter of patients, and OCS and PS co-occurred in 25% of patients.[13] These authors also reported that the presence of OCS was associated with earlier schizophrenia onset in schizo-obsessive patients and that men had an earlier onset of both sets of symptoms.[13]

In another study by Fontenelle *et al.*, patients presenting both PS and OCS were more likely to report a positive family history of anxiety disorders than those with psychotic but no OCD symptoms.[2] Faragian proposed that schizo-obsessive disorder had a marked neurodevelopmental origin and particularly early onset in men.[13]

A recent update on schizo-obsessive spectrum disorders showed that, despite the considerable amount of evidence in the literature showing the clinical relevance of schizo-obsessive disorder – which seems to have epidemiological, clinical, and phenomenological differences from the parental conditions –, little is known about neurobiology, genetic, and neurocognitive aspects or pharmacological treatment strategies for the condition.[11] Additionally, follow-up data about the clinical course of the disease is crucial. Extended follow-up is desirable to investigate whether there is further functioning decline or broadening of disordered thinking.[3]

CONCLUSION

The distinction between OCD and psychosis is not always clear.

One may present OCD with reduced insight/delusions or have OCS as prodrome of a psychotic disorder. Treatment and prognosis of both conditions differ and establishing a diagnosis warrants extensively exploring symptoms. In this case, a number of factors suggestive of psychotic disorder within OCD were present, namely male gender, early age of presentation, presence of delusions and some thought disorganization with periods of alteration of thought possession, and family history of anxiety disorders.

Time and follow-up are crucial for longitudinal analysis and further outcome clarification.

AUTHORSHIP

Mafalda Marques - Conceptualization; Data curation; Investigation; Methodology; Writing - original draft

Pedro Santos - Conceptualization; Data curation; Investigation; Methodology; Writing - review & editing

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