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Case report

Brief psychotic disorder with delusion content related to the COVID-19 outbreak

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ABSTRACT

The COVID-19 outbreak has affected millions of people globally and it also has a huge psychological impact. The objective of this case report is to outline the possible effect of the COVID-19 pandemic to the content of delusions in patients with psychosis. A 34-year-old male with no history of mental disorder, involuntarily hospitalized due to agitation and aggression towards others, experienced grandiose delusions, referential delusions and delusions of passivity. The content of all his delusions was related to the COVID-19 pandemic. His symptoms were not proven to be caused by any physical condition or substance use disorder. He was prescribed olanzapine 10 mg and lorazepam 2,5 mg daily and demonstrated significant improvement with a complete subsidence of his symptoms within a week. He was discharged after a total of 13 days with an ICD-10 diagnosis of brief psychotic disorder. At his 6 months follow-up, he reported no psychiatric symptoms. Existing literature indicates a strong relationship between life experiences and the content of delusions. This case report highlights how the stressful life event of the COVID-19 outbreak affected the content of our patient's delusions.

KEYWORDS: COVID-19, delusions, delusional content, stressful life events, brief psychotic disorder.

Introduction

Since late December 2019, humanity is facing an unprecedented situation due to the latest outbreak of COVID-19, which the World Health Organization declared a public health emergency of international concern on 31th of January 2020. At the time of writing, it has affected more than 36 million people all over the world and the death toll rises currently to 1.092.000. Countries around the world had to implement measures to control the spread of the coronavirus, from school closures to national quarantines. In Greece, social-distancing measures have been applied and multi-day lockdowns have been enforced causing huge psychological distress on citizens.[1]

Thus, the actual threat to public health, the constant media preoccupation with the pandemic and social distancing have turned the last few months into a very stressful life experience. In the literature, the causal relationship between previous or current stressful life experiences and the manifestation of a psychotic episode is well established. The impact of prior stressful life events in the enrichment of the delusional theme in patients with psychosis is also outlined.[2–5]

The following case report is about a man in his thirties with no prior history of psychosis or any other mental disorder who expressed acute delusions with content related to coronavirus.

Case report

In May 2020, a 34-year-old male was involuntarily admitted for hospitalization, following a court order, due to delusions, disorganized behavior and agitation. He was unmarried, a graduate of higher education, living with his parents and sister. He was neither a smoker nor an alcohol user, but he used cannabis occasionally (last

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use 10 days prior to admission). Neither he nor his family had a remarkable history of mental disorder.

Two days prior to admission, he started feeling agitated and expressed grandiose delusions related to the recent coronavirus outbreak. He believed coronavirus constituted an organized threat, which he should help eliminate. He also mentioned that we were all somehow divided into groups based on our mask colors and he was very aggressive towards "members of superior groups". He constantly asked his family if "they support the good ones or the bad ones" and if "they want to be slaves or free people". He also expressed referential delusions, having the perception that specific books (for example N. Kazantzakis books) contained coded information foreseeing the coronavirus outbreak and its impact.

The next day, he developed disorganized behavior, walking around the house with his underwear (something he did not use to do). He also expressed fears for his girlfriend's safety whom, according to him, somebody had abducted and hugged his sister constantly to check if she had wings. In the meantime, he was yelling "we will crush coronavirus". Furthermore, he expressed delusions of passivity mentioning that an evil force, like a cockroach, was implanted in his forehead and controlled him. Throughout these events, he was referred to be much stressed, irritable and, at times, emotional.

His family worried that his behavior was due to a neurological condition and for that reason, by his arrival to the emergency department, a neurological evaluation preceded. Laboratory tests (complete blood count, basic metabolic panel, lipid panel, thyroid panel, nutrient tests) and brain CT scan did not reveal any abnormalities. A psychiatric evaluation was then requested but he became very aggressive and physically assaulted the psychiatrist. He thought that he was not a real doctor, since he did not wear a medical gown. He was evaluated as a danger to others; thus, he was involuntary admitted to a psychiatric ward.

Upon admission, he was oriented to time, place and person and maintained eye contact. He was, however, very agitated, non-cooperative, with increased psychomotor activity. He was anxious, irritable and hostile and his affect was of normal range and intensity. No thought disorder or speech disturbance was detected. He expressed well-formed referential delusions, grandiose delusions and delusions of passivity, all concerning coronavirus. No hallucinations were detected and he had partial insight of his condition. His Positive and Negative Symptoms Scale (PANSS) score was 67 (Positive: 25, Negative:8, General Psychopathology: 34) and his Hamilton Rating Scale for Depression (HRSD) score was 25.

He was prescribed olanzapine 20 mg and lorazepam 7.5 mg daily. One day after his admission, he developed a fever, (37.9 °C) with elevated CRP: 11.3 mg/L but no other remarkable change in his laboratory tests. He developed no other symptoms; nevertheless, he was tested for COVID-19 and proved negative. During the next days, his temperature was within normal range.

A brain MRI scan revealed white matter lesions, mainly periventricularly corresponding to the posterior part of the body and the trigones of the lateral ventricles. Neurologists requested also an EEG, antibodies tests, lumbar puncture and a second brain and cervical MRI scan with contrast, from which no specific neurological disorder was identified and a one-year follow-up was recommended.

He had a rapid response to treatment and his psychotic symptoms significantly improved in the first couple of days and completely subsided within a week. He was discharged after 13 days of inpatient treatment with an ICD-10 diagnosis of brief psychotic disorder.[6] Upon discharge, his total PANSS score was then 36 (Positive:7, Negative: 7, General Psychopathology: 22) and his HRSD score was 11. At his 6 months follow-up, he reported no psychiatric symptoms.

Due to the short duration of the psychotic episode (about 10 days) the ICD-10 diagnosis of acute schizophrenia-like psychotic disorder and schizophrenia were rejected. The ICD-10 diagnosis of psychotic disorder due to use of cannabinoids and unspecified organic or symptomatic mental disorder were also rejected as the psychotic symptoms were not deemed to be related to cannabis use (intoxication or withdrawal) and were not proven to be caused by any physical condition. In addition, there were no indications of major mood episodes (depressive or manic), so the criteria of the ICD-10 diagnosis of schizoaffective disorder and bipolar affective disorder were not met.[6]

Discussion

There has been an extensive discussion in the literature on the mental health consequences of the COVID-19 pandemic among the general population and an increased incidence of common mental disorders such as depression, anxiety and posttraumatic stress disorder (PTSD) is expected.[7] However, limited attention is paid to a number of vulnerable people who might develop psychosis under the psychosocial stress related to the COVID-19 pandemic.[8] Our patient, who had no remarkable personal or family psychiatric history, exhibited grandiose, referential and passivity delusions with content related to coronavirus after the stressful experience of the lockdown. There is limited evidence suggesting that stress related to the COVID-19 pandemic

can cause or precipitate the manifestation of a psychotic episode in apparently unaffected by the virus healthy individuals, with just one case report of a man of similar age in Malaysia.[9]

DSM-V in its definition of the term delusion, includes the following: "Delusions are deemed bizarre if they are clearly implausible and not understandable to some culture peers and do not derive from ordinary life experience" .[10] This statement seems to explicitly accept the link between non-bizarre delusion content and previous experiences or emotional conditions, thereby expanding the possibilities of understanding a patient's psychotic symptoms.[11] A relationship has been demonstrated between intrusive events and persecutory delusions or danger events and depressive delusions.[12] It is generally considered that psychotic symptoms have specific meaning for each patient and that they may facilitate a "making of sense" of complex feelings related to stressful experiences. Empirical studies have also shown that certain life events may specifically influence the delusional theme.[13]

Thus, as the link between delusion content and stressful life events is well established, a modification to their theme due to COVID-19 pandemic and its impact is now expected. One such indication is our case report. Since evidence upon this matter are limited so far, further research in this field is required.

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Ενδιαφέρουσα περίπτωση

Βραχεία ψυχωσική διαταραχή με παραληρητικό περιεχόμενο σχετιζόμενο με την πανδημία COVID-19

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ΠΕΡΙΛΗΨΗ

Η πανδημία COVID-19 έχει επηρεάσει εκατομμύρια ανθρώπους ανά τον κόσμο με σημαντικό αντίκτυπο, πλην της σωματικής, και στην ψυχική υγεία. Σκοπός αυτού του άρθρου είναι να επισημάνει την επίδραση της πανδημίας στο περιεχόμενο των παραληρητικών ιδεών σε ασθενείς με ψυχωσική συνδρομή. Άνδρας, 34 ετών, με ελεύθερο ψυχιατρικό ιστορικό, ο οποίος παρουσίασε παραληρητικές ιδέες μεγαλείου, αναφοράς, επίδρασης, ψυχοκινητική διέγερση και ετεροεπιθετικότητα, νοσηλεύθηκε κατόπιν εισαγγελικής εντολής στην κλινική μας. Το περιεχόμενο των παραληρητικών ιδεών του ασθενούς αφορούσε την πανδημία COVID-19. Η συμπτωματολογία του δεν αποδόθηκε σε χρήση ουσιών ή άλλη ιατρική κατάσταση και τέθηκε η διάγνωση βραχείας ψυχωσικής διαταραχής κατά ICD-10. Χορηγήθηκε ολανζαπίνη 20 mg και λοραζεπάμη 7,5 mg ημερησίως με πλήρη ύφεση των συμπτωμάτων του και έλαβε εξιτήριο μετά από συνολικά 13 ημέρες νοσηλείας. Στο 6μηνο follow-up ο ασθενής παρέμενε ελεύθερος συμπτωμάτων. Στη βιβλιογραφία αναφέρεται ισχυρή συσχέτιση μεταξύ των γεγονότων ζωής και του περιεχομένου των παραληρητικών ιδεών. Με το εν λόγω περιστατικό επισημαίνεται η επίδραση του συγκεκριμένου γεγονότος ζωής, της πανδημίας COVID-19, στη διαμόρφωση των παραληρητικών ιδεών του ασθενούς μας.

ΛΕΞΕΙΣ ΕΥΡΕΤΗΡΙΟΥ: COVID-19, παραληρητικές ιδέες, παραληρητικό περιεχόμενο, ψυχοπιεστικά γεγονότα ζωής, βραχεία ψυχωσική διαταραχή.

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