THE ONSET OF DEMENTIA THROUGH THE COTARD SYNDROME - THE DELIRIUM OF NEGATION

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ABSTRACT

ICD-10 (The ICD-10 Classification of Mental and Behavioral Disorders. Clinical description and diagnostic guidelines)

Introduction. Cotard syndrome is a neuropsychiatric pathology that is uncommon in medical practice but has a significant impact on public awareness of the importance of mental health. This mental disorder is also known as negation delirium, living dead syndrome, nihilistic delirium, or walking corpse syndrome. Objectives. A clinical case of a patient diagnosed with dementia due to late-onset Alzheimer's disease is presented; dementia also includes symptoms of Cotard's syndrome. Over time, the transmission of knowledge and data about Cotard Syndrome, despite its very low frequency, has become a pathology that intrigues and inspires curiosity among individuals. Consciousness of the existence of this delirious illness and the accurate definition of the symptoms of a dual diagnosis are required in a number of psychiatric pathologies. Method. This document was created using the "Elisabeta Doamna" psychiatry hospital Database from Galati, Romania, where patient data was acquired and admitted to the Psychiatry Clinic Section II. In addition, a variety of bibliographical references and diagnostic criteria were utilized, including the ICD-10 (the Classification of Mental and Behavioral Disorders, Clinical Description, and Diagnostic Guidelines), the DSM-5 (the Diagnostic and Statistical Manual of Mental Disorders), and the psychometric tests: the MMSE (the Mini Mental Status Test) and the GAFS (the Global Functioning Assessment Scale). Results and Conclusions Despite having no psychiatric history, the patient arrived at the psychiatric hospital after experiencing psychiatric symptoms caused by both Alzheimer's disease and Cotard's syndrome, symptoms that were ignored and gradually deteriorated, resulting in full-blown delirium, rapid dementia degradation, and a not-very-favorable outlook.

Keywords: Cotard Syndrome, Alzheimer disease, delirium of negation, dementia, psychiatry.

INTRODUCTION

Cotard syndrome is a rare disease that causes people to question their own existence, leading them to believe that they are dead, that they are missing body parts or organs, or that they have no body at all, the last symptom being the most severe case of homonymous syndrome, according to the author's classification. Despite the fact that this mental illness was discovered in 1788 and was observed and analyzed by a number of people, it was not officially defined until 1880, when French neurologist Jules Cotard gave a lecture to the Medical Psychological Society in Paris. At that time, Cotard described this psychotic denial of his own existence as a deep, melancholy dementia, often linked to severe hypochondria, depression, suicidal tendencies, and the powerful conviction of the person that his life is over and that he is
already dead; in a few of these cases, patients believed themselves to be immortal people or gods. In his article, Cotard also referred to the reports of other French physicians who had patients suffering from this disease and believed they had lost all their blood or had no brain, head, stomach, heart, or other organs or were in a rotten state. (Nica-Udangiu et al., 2000).

The delusional concept is a disruption of thought function, which results in an incorrect reflection of reality, and the pathological character of these multiple diseases is not recognized by the person involved, resulting in an adverse, pathological modification of culture, the globe, and, finally, the association of another psychiatric disease, the personality disorder.

Cotard's syndrome is mainly defined by the presence of an illusionary concept, a delirious idea of negation. The delirium of negation differs from the other types of delirious thoughts in the following way: the patient defines the existence of delirium by implicitly involving himself in the corresponding life and firmly believing in delirious concepts, whereas other delirious syndromes impose the presence of another individual for the diagnosis (Sadock et al., 2009).

Dementia, as described in ICD-10 (Mental and Behavioral Disorders Classification), is a chronic or progressive brain disease syndrome in which many higher cortical functions, including mental function, thinking, orientation, comprehension, computation, learning ability, language, and judgment, are deteriorated (World Health Organization, 1993). Deterioration of cognitive function is usually followed by a decline in social behavior, emotional control, or motivation. In view of the fact that dementia causes a marked decrease in intellectual functioning, it can also be defined as a malfunction in day-to-day operations such as personal hygiene, washing, clothing, feeding, etc. (World Health Organization, 1993). Alzheimer's disease, the most common degenerative brain disease, is currently thought to be irreversible, with an unknown etiology and neuropathological and neurochemical characteristics (World Health Organization, 1993). The onset of this disease may occur in the middle of adult life or even earlier, but the incidence is higher in the latter part of life (World Health Organization, 1993). There is a chance of a family history of comparable dementia with faster evolution and more prominent characteristics, indicating a temporal lobe and parietal lesion, including dysphagia and dyspraxia in cases with onset prior to the age of 65 (World Health Organization, 1993). In cases of late onset (dementia in late-onset Alzheimer's disease), the progression of the disease may be slower and almost globally characterized by a deterioration of superior cortical functions (World Health Organization, 1993).

**LATE-ONSET ALZHEIMER'S DISEASE DEMENTIA AND ITS ASSOCIATION WITH COTARD'S DISEASE. A CLINICAL CASE IS PRESENTED.**

Mrs. M.A. Patient, female, 69 years old, Romanian, Christian-Orthodox, urban, was admitted in emergency, accompanied by her children in Galati, Romania, on November 13, 2018, in relation to the psychiatric symptomatology described below.

**HOSPITALIZATION REASONS**

- Delirious concept of death ("I feel like I died")
- Practical functional difficulties (spontaneous and voluntary hypoprosis)
- Mnestic function difficulties (fixing and evocation hypomnosis)
- Behavioral disorder
- Temporal-spatial (partial) disorientation

**ANAMNESIS**

**History of hereditary collateral:** not important

**Personal physiological history:** first menstruation at the age of 14, menopause at the age of 50, seven pregnancies, three natural births, and four spontaneous abortions

**Personal pathological history:** she has had HTA (hypertension) for 15 years and is in therapy, but medication has been neglected in recent months.

**Personal surgical pathology history:** tonsillectomy at the age of 15, appendectomy at the age of 18.

**Background psychiatric pathology:** the patient was not registered and was never admitted to a psychiatric hospital.

**Living and working circumstances:** The patient lives in an urban area with her husband; she graduated from middle school, worked in the bakery sector for 20 years, is now retired, and spends the majority of her time at home; in recent years, she has been caring for her husband due to various somatic circumstances,
with friends or neighbors who are no longer socializing as much as before, three children who rarely visit her (1-2 times a month), and two pets (cats).

**Behaviors:** the patient has been smoking 10 cigarettes per day for the past 30 years.

**Background medication:** Indapamindum tablets, 1.5 mg 1cp/day; Metoprololum, tablets, 50 mg, 2 cp/day. The patient was given intermittent background therapy, which caused hypertensive outbreaks.

**HISTORY OF DISEASE**

The originators reported many years ago on the start of dementia phenomenology. Initially, family members observed the symptoms because of the patient's difficulties in remembering recent events (she couldn't remember what she ate when she was shopping or whether she closed the door when she left home). Members of her family noticed the onset of dementia phenomenology many years ago. Initially, the symptoms were noted by family members due to problems remembering recent incidents (the patient could not remember what she ate when she was shopping or when she closed the door when she left home). Symptoms worsened over time as a result of exacerbating mental illnesses that limited their level of social functioning (problems with daily responsibilities such as cooking, washing, cleaning, and shopping). Suddenly, three weeks ago, the patient began reporting theft thoughts (she could no longer find things and thus accused her parents of stealing things), then the ideas took on strange forms (elements of Cotard syndrome, which is why the patient was taken to the psychiatric hospital by ambulance).

**PSYCHIATRIC EXAMINATION**

Internal tension and anxiety are expressed through hypermobile facial expression and mimicry; the patient wears a seasonal and age-related city costume but is disturbed, maintaining body hygiene with the assistance of the caregivers; with the pressure to talk, the psycho-verbal contact is relatively easy to establish, and the visual contact is attempted and maintained, expressing internal anxiety, spontaneous speech that began without problems, high pitch and high flow, precipitated on an anxious background, decreased lexicon, suspicious, hostile attitude, against delirious ideation, and hyperkinesia with nocturnal amplification.

The patient is lucid, has temporary disorientation (he doesn't understand the year or the day, but he knows the month and season), spatial disorientation (he knows the country, county, city, but not the hospital), and psychological difficulty.

The patient has physical hypoesthesia, rejects qualitative perception disturbances, physical hypnosis, spontaneous and voluntary hypoprosis, fixation and evocation hypnosis, contextually accelerated rhythm and ideo-verbal flow, poor vocabulary, and poor school readiness (poor patient and school preparation) sentences to describe what she feels.

With the alteration of social behavior and accentuation during the night, against the background of cognitive disorientation, the content of the idea is dominated by the illusion of the Cotard type ("I feel like I'm dead"). The idea has grown quite sharply, causing an aggressive behavioral reaction. Background anxiety, suspicion, and deception.

Useful effectiveness was significantly reduced, both by limiting fundamental functioning (cooking, dressing) in the context of dementia and by delirious backgrounds with a marked loss of instincts.

Impoverished global imagination, but alive in the context of the delusional idea. Intellect greatly diminished from school preparation (due to cognitive disorder).

Low eating instincts (both in cognitive contexts and especially in delirious contexts), lack of defense instinct in delirious cases, and lack of sexual instinct due to age.

Hypnotic initiation, maintenance, and awakening disorders; lack of insight (the patient does not believe she has a mental illness, because she is confident she has died; the patient also does not recognize the prescribed therapy) (Prelipceanu, 2011).

**POZITIVE DIAGNOSIS**

Axis 1: Dementia in Alzheimer's disease with late onset

Axis 2. There are no elements

Axis 3. High blood pressure

Axis 4: Psychosocial factors: positive (married, has three children) and negative (children rarely visit her, family support is limited, her spouse has different somatic circumstances and does not assist her in daily duties or moral support, family relations are not favorable, as the patient has gradually become socially
isolated in recent years, both in comparison to families).

Axis 5: GAFS (Global Assessment of Functionality Scale): 30–50 points (severe symptomatology: social isolation, abandonment of social and domestic activities, etc.) (Sadock & Sadock, 2010).

**Late-onset Alzheimer's disease**, based on ICD-10 criteria: the onset of the disease is insidious and progressive, with moderately severe intensity over several years.

**Elements of the Cotard Syndrome**: denial of one's own existence; the patient was convinced that he had died, a profound melancholy dementia.

### DIFFERENTIAL SCREENINGS

1. Major neurocognitive diseases caused by other neurodegenerative mechanisms (Lewy body disease, frontotemporal degeneration) have an insidious onset and a gradual decline in common with Alzheimer's disease but have their own characteristics. (American Psychiatric Association, 2016).

2. Cognitive disorders caused by medical conditions (neurological or systemic): hypothyroidism, severe head trauma, vitamin B12 deficiency, anemia; other simultaneous neurological or systemic diseases should be considered neurological or systemic if the clinical picture can be justified by temporal association and severity. (American Psychiatric Association, 2016).

3. Major depressive disorder (particularly in the case of mild neurocognitive disorders, the differential diagnosis should include major depressive disorder). (American Psychiatric Association, 2016; Checherita et al., 2019; Păduraru et al., 2019).

4. Acute psychotic disorder due to a medical condition

5. Delusional disorder

6. Simulation


### CASE MANAGEMENT

1. **Drug treatment Acute**: therapy to reduce hyperkinesia and delirious ideation. Antipsychotic therapy, high-dose antidepressant therapy, and sedative therapy for hypnotic diseases have all been initiated.

2. **Clinical psychological evaluation**: It was done with the MMSE and GAFS, and it resulted in moderately severe dementia but with a tiny functional GAFS of 30 to 50 points. During treatment, the patient stabilizes with a reduced behavioral syndrome, but with the persistence of the ideation of the Cotard type, whose intensity has decreased to a prevalent and obsessive level, the patient does not have hyperkinesia. Drug therapy and psychological advice are given to the patient (Sadock et al., 2009).

### EVOLUTION AND PROGNOSIS

Due to more significant factors—old age, lack of family support, discontinuation of antihypertensive therapy, and diagnosis of dementia or chronic progressive disease—the prognosis is reserved. The patient was transferred to a higher-level psychiatric hospital in Bucharest, where he was diagnosed with late-onset dementia and Cotard syndrome.

The patient introduces the control for the continuation of the therapy. After the debate with the children, the specialized control showed a persistence of Cotard syndrome but a decrease in intensity (obsessive) and a continuous evolution of the frequency of dementia (MMS, stationary GAFS) (Sadock et al., 2009).

### THE CASE'S UNIQUENESS

This is a unique case; the condition was diagnosed in a psychiatric hospital in Galati, and the link between late-onset Alzheimer's dementia and Cotard's syndrome is unique because Negation's syndrome is more commonly associated with schizophrenia, bipolar affective disorder, and severe anxiety, not dementia. Another distinguishing feature of the scenario is that Cotard Syndrome is a precursor to Alzheimer's disease.

### EXAMPLES OF COTARD’S DELUSION CASE REPORTS

1. Cotard referred to her as Mademoiselle X in his notes, and he stated that she had "no brain, no nerves, no chest, no stomach, and no intestines." Despite the difficulty of her situation, she was
under the impression that she "was everlasting and would live forever." She reasoned that since she
was eternal and hadn't had any intestines to begin with, there was no reason for her to consume
food; as a consequence, she perished from famine.

2. Ms. Lee, a patient from New York who was 53 years old at the time, stated in 2008 that she smelled
like decaying flesh and that she was dead. She asked her relatives to take her to a morgue so that
she might be buried with other individuals who had passed away, and they complied with her request.
Instead, they phoned the emergency services. After accusing emergency medical personnel of
attempting to set fire to her home, Ms. Lee was confined to the mental ward of the hospital. After
about a month of taking the medicine, she showed a considerable improvement in her symptoms and
was able to be discharged.

3. In 1996, a man from Scotland who had been injured in a brain injury caused by a motorbike accident
started to believe that he had passed away due to difficulties that arose during his rehabilitation from
his injury. Together with his mother, he moved from Edinburgh to South Africa not long after he had
finished his recovery program. He told to his physicians that the heat proved he was right in his
thinking since only hell could possibly be that hot.

4. In 2012, Japanese medical professionals recounted a patient who was 69 years old and had informed
one of them, "I think I'm no longer living." "Could you perhaps share some of your ideas with me on
this?" The patient was aware that his state contradicted logic when the doctor questioned whether or
not a dead man could talk; nonetheless, he was unable to disabuse himself of the notion that he was
already dead. After a year had passed, his hallucination began to pass, but he remained convinced
that what had actually taken place during that time was accurate. "I'm awake now. But I had already
passed away at that point!" He gave an explanation.

5. In 2009, psychiatrists in Belgium documented the case of an elderly man who was 88 years old and
appeared at their hospital exhibiting signs of depression. The man said that he had passed away and
was concerned that he had not been buried yet because no one had done so. His delusions improved
as he was receiving treatment.

6. Another patient, a 46-year-old lady, who said that she hadn't eaten, urinated, or slept in months was
treated by the same physicians. She said that her organs had rotted away, that she had no blood,
and that the physicians who monitored her heart or measured her blood pressure were lying to her
because her heart wasn't beating at the time. In spite of the fact that she was admitted to the
hospital more than once and often forgot to take her medicine, her condition steadily improved over
the course of the following ten months.

7. In the year 2003, psychiatrists in Greece saw a patient who was under the impression that he had no
brains at all. Earlier in his life, he made an unsuccessful attempt at taking his own life because he felt
that his lack of mental capacity rendered his life meaningless. After the event, he did not receive
medical treatment and instead went straight back to work. When he was admitted to the hospital, he
made the statement that "he was born without a mind, which means that his head is empty since he
was born without a brain, and as a result, he is mentally handicapped." After a few days, he decided
to leave against the recommendation of the medical staff, but he was readmitted the following year.
This time, he finished treatment, and a follow-up interview many months later revealed that he had
maintained the improvements he had made during treatment.

8. A 72-year-old lady who went to the emergency hospital claiming that "all of her organs had melted;
just skin had left and that she was virtually dead" was treated by the Greek physicians. She was
checked into the hospital, but the details of her illness were not made public.

9. In 2005, Iranian medical professionals detailed what they consider to be the most peculiar case that
has ever been reported. A man in his thirties presented himself at their facility with the story that he
had not only passed away but that he had also been reincarnated as a dog. He stated that his wife
had experienced the same thing as he had. He was under the impression that his three daughters
had likewise passed away and reincarnated as sheep. He stated that his relatives had made an effort
to poison him, but that nothing could harm him since God had protected him even in death. He
claimed that this was the case even though his relatives had tried to poison him. After undergoing
electro-convulsive treatment (ECT), which he underwent after being diagnosed with Cotard's illness
and clinical lycanthropy, the majority of his symptoms improved.

RESULTS AND CONCLUSIONS

In the specialized literature, approximately 300 medical cases have been researched and analyzed in which
the diagnosis of Cotard syndrome has been linked to psychiatric, neurological, or traumatic pathologies.
The statistical analysis revealed an increase in incidence between the ages of 50 and 60 in young adults, but
also in the elderly, particularly women.

Such cases are difficult to treat because patients no longer feed themselves, their appetite for food is
suppressed, and they constantly refuse food, arguing that they do not have the digestive system or parts of it anyway, so they do not need food, which has serious consequences for the body and can lead to death by starvation (Prelipceanu, 2011).

British neuropsychologist Paul Broks suggests this syndrome of negation may be based on a neurological disorder leading to a decoupling of feelings and thoughts. So simply believing that we exist is insufficient; we must also experience it. Broks therefore claims that the saying of Descartes, "I believe so I exist" (cogito, ergo sum) must be altered to "I feel like I believe so I exist." Cotard's syndrome is one of a group of rare, strange mental illnesses that have too little data or information and are difficult to diagnose and treat.

Despite having no psychiatric history, the patient arrived at the psychiatric hospital after experiencing psychiatric symptoms caused by both Alzheimer's disease and Cotard's syndrome, symptoms that were ignored and gradually deteriorated, resulting in full-blown delirium, rapid dementia degradation, and a not-very-favorable outlook.

REFERENCES


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