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WALKING CORPSE SYNDROME – A DELUSION OF BEING DEAD

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ABSTRACT

Walking corpse syndrome is a rare condition which is yet to be classified as a disorder. Its distinguishing feature is the nihilistic delusion of being dead and denying the presence of organs and blood in his body. Its incidence, prevalence, etiology, pathophysiology and diagnosis are yet to be discovered. This syndrome is often associated with other psychiatric disorders and medical conditions including Schizophrenia, bipolar disorder, migraine, syphilis, etc. Various hypotheses have been postulated to explain the cause of this syndrome such as multifocal brain atrophy, interhemispheric enlargement and various others. CT, MRI scan, EEG may help in observing brain abnormalities leading to this syndrome. Its stages are identified as germination, blooming and chronic stage. It is classified into psychotic depression, Cotard type 1 and Cotard type 2. By far, Electroconvulsive therapy (ECT) is the best treatment option for this syndrome. Benzodiazepines like olanzapine and mirtazapine have also shown good therapeutic results in this syndrome. This syndrome may be resolved soon with ECT and benzodiazepines. Treating the associated medical conditions ensures good prognosis.

Keywords: Cotard's syndrome, Nihilistic delusion, Melancholia, Hallucinations, Electroconvulsive Therapy.

INTRODUCTION

"Walking corpse syndrome" or "Cotard's delusion" or "Cotard's syndrome" is a rare disorder whose distinctive feature is nihilistic delusion of being dead associated with various unrealistic or fanciful beliefs regarding him/her [1]. The patient doesn't eat or focus on his personal hygiene as he considers himself dead and causes self-destruction by self-starvation leading to various nutritional and electrolyte imbalances within the body [2], [3]. He denies the existence of people around him and the organs or blood present inside him [1].

A German chemist Hermann Emil Louis Fischer coined the term "Cotard's syndrome" after the name of the French Neurologist Jules Cotard who was the first to describe this syndrome[1]. In the year 1880, Jules Cotard described this syndrome when he observed it in a 43 year old woman [4]. He suspected it as a new type of troubled melancholia (severe depression) [5]. Jules Cotard used a term "le delire de negation" (delusional nihilism) in the year 1882 to this syndrome [4].

EPIDEMIOLOGY

Cotard's delusion is one of the rare disorders yet to be classified as a separate syndrome. Its incidence and prevalence is not clearly known [6]. It shows sudden onset mostly during the late middle life [6], [7]. The mean age is found to be 47.7 years. It has also been observed in few children and adolescents [4]. Females are more likely to develop Cotard's delusion [8]. However, there are cases of males who are affected by this.

ETIOPATHOGENESIS

Walking corpse syndrome is often seen in co-existence with other psychological disturbances. Psychotic and mood disorders as well as other medical disorders seem to predispose Cotard's delusion [1]. These include Syphilis and Neurosyphilis, Dementia, Capgras delusion, Mental depression, Typhoid fever, Multiple sclerosis, Lycanthropy[9], Schizophrenia, Brain tumors, Bipolar disorder, Depersonalization disorder, Parkinson's disease[10], Hydrophobia, Adverse effect of Acyclovir and its metabolite valaciclovir (Anti-viral agents), Migraine, Superior sagittal sinus thrombosis, Traumatic brain injury, Epilepsy, Frontotemporal atrophy, Cerebral infarction, Cerebrovascular disease, Cerebral arterio-venous malformation, Catatonia, Herpetic and Non – herpetic encephalitis, Postictal depression. [11], [12]

In few cases, abnormalities like right temporal lobe atrophy, bilateral cerebral atrophy, dilation of third and lateral ventricles, sylvian and interhemispheric fissure enlargement, haemorrhagic contusion of right temporal cortex, left parietal lobe lesions, temporal lobe epilepsy, bilateral hypoperfusion in basal ganglia, dorsolateral frontal lobes, thalamus and fronto parietal medial cortex, electrophysiological abnormalities showing right temporal predominance, face and expressions recognition impairment are observed but these may not be considered the reasons for Cotard's syndrome as this syndrome is often associated with other disorders [13].

Several hypotheses were proposed to explain the pathophysiology of Cotard's delusion which needs to be researched more and confirmed. These hypothetic proposals include: irritative focus in right frontal and temporal lobes, multifocal brain atrophy, non-dominant cerebral hemisphere abnormalities, interhemispheric enlargement, right temporal lobe dysfunction, hypoperfusion of frontal dorsolateral cortex and medial fronto parietal [13]. A proper etiology and pathophysiology of Cotard's delusion is yet to be identified.

SYMPTOMS

The primary and distinguishing symptom of Cotard's delusion is nihilistic delusion, the feeling of being dead and missing or malfunctioning of their organs and blood [7]. This syndrome seems to be related greatly to depression. Moreover prior to the Cotard's delusion a typical period of initial anxiety is observed [8]. Various symptoms are associated with this syndrome which include anxious melancholy, tendency to suicide, restlessness, hopelessness, loneliness, reduced social interactions, lack of interest and concentration, catatonia, drowsiness (somnolence), damnation, coherent and irrelevant speech, mutism, deceased appetite, weight loss, self-starvation, low energy, negation, urinary and fecal incontinence, negligence of personal hygiene, sleep disturbances, insomnia, palpitations, non-dominant parietal lobe lesions, delusion of guilt and sin, rigidity in all limbs.[3], [10]Symptoms appear to vary depending on the progression of the syndrome. Thus, Yamada et al classified Cotard's delusion into three stages in 1999 which are as follows [4]:

- Germination/ Prodromal stage which is characterized by hypochondriasis, depression and cenesthopathy
- Blooming stage which is characterized by Nihilistic delusions, negative feelings and anxiety
- Chronic stage characterized by mood swings and systemization of delusions which is again of two types
  - Depressive type which is characterized by continuous emotional disturbances
  - Paranoid type characterized by less marked depression [14]

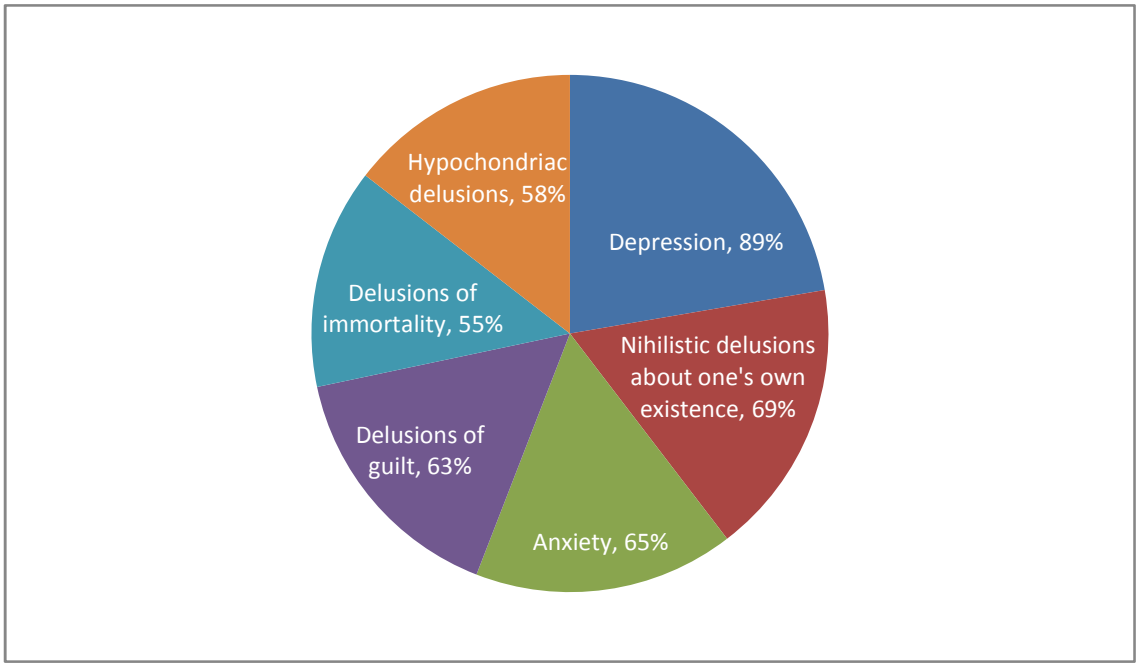

Figure 1: Symptoms of Cotard's delusion [5]

TYPES OF COTARD'S DELUSION

- Psychotic depression marked by delusions of guilt, auditory hallucinations, melancholia and anxiety
- Type 1 marked by nihilistic delusions, and hypochondriasis
- Type 2 marked by nihilistic delusions, auditory hallucinations, anxiety, delusions of immortality, suicidal attempts, depression.[5]

DIAGNOSIS

A selective diagnostic criteria isn't available for this syndrome however there are certain symptoms which distinguish it from other psychiatric disorders. Depression is most common in these patients. Nihilistic delusions regarding the existence of him, people around him, his organs and blood demarcate it from other conditions [3], [7]. Peculiar delusions such as "I'm dead", "There's no blood in my body", "I smell like a rotten flesh" [1], "My stomach is missing" [7], "Neuroleptics paralyzed my limbs", "I cannot take shower, I may dissolve in water" [2], "I have no chest", "My house may collapse at any moment it developed cracks" [3], [4] are also characteristic of Cotard's delusion. SPECT and CT scan, MRI scan and EEG might be useful in detecting the abnormalities causing the syndrome [13].

TREATMENT

Electroconvulsive therapy (ECT)

ECT is considered the best treatment for numerous psychiatric disorders including depression. It works excellent in the treatment of Cotard's delusion as well. It works better than pharmacological treatment [1]. ECT is the choice of treatment for Cotard's delusion to which many patients have responded really well [15], [16]. This treatment involves giving an electrical impulse to the patient to induce a seizure which helps in reducing the symptoms of the syndrome. Around 8 ECTs (nearly 3 per week) appear to be efficient for the eradication of nihilistic delusions and other symptoms of it completely [7]. ECT improves the blood supply to the hypoperfused areas of brain found in some patients with Cotard's delusion [13].

Pharmacological treatment

Albeit ECT shows best results, many drugs (antidepressants and / or antipsychotics) have shown positive results in the treatment of Cotard's delusion [6]. Benzodiazepines are largely applied

for its pharmacological treatment. Various benzodiazepines that have been implemented for its treatment by far include Olanzapine, Carbamazepine, Mirtazapine, Clozapine, Lorazepam and Quetiapine. Bromocriptine augmentation therapy showed positive results in a case [17]. Quetiapine and venlafaxine combination therapy was also successful in treating a Cotard's delusion case associated with Schizophrenia [18].

CONCLUSION

Cotard's syndrome remains as a condition that is yet to be classified as a disorder. Its incidence and prevalence isn't known properly. It is usually associated with depression and nihilistic delusions of being dead and negation of presence and functioning of organs and blood in their body. Various symptoms like tendency to suicide, restlessness, hopelessness, loneliness, reduced social interactions, lack of interest and concentration, catatonia, drowsiness, damnation, coherent and irrelevant speech are seen. Symptoms vary depending on the progression of the syndrome. Three stages have been identified namely germination stage, blooming stage and chronic stage. The syndrome is classified into Psychotic depression, Cotard type 1 and Cotard type 2. ECT is the choice of treatment and various benzodiazepines have been found useful in the treatment. After ECT symptoms seem to resolve completely. Cotard's syndrome is a rare disorder on which extensive research shall be done. Procuring of its complete information is needed in order to obtain better prognosis, management and preventive methods.

REFERENCES

[1]. Ruminjo A, Mekinulov B. A Case Report of Cotard's Syndrome. *Psychiatry (Edgmont)*. 2008; 5(6):28-29.

[2]. Hans Debruyne, Michael Portzky, Van den Eynde, Kurt Audenaert. Cotard's syndrome: A review. Current Psychiatry Reports. June 2009, Volume 11, Issue 3, pp 197-202.

[3]. Grover S, Aneja J, Mahajan S, Varma S. Cotard's syndrome: Two case reports and a brief review of literature. *Journal of Neurosciences in Rural Practice*. 2014; 5(Suppl 1):S59-S62. doi:10.4103/0976-3147.145206.

[4]. Hans Debruyne, Michael Portzky, KatheljnePeremans, Kurt Audenaert. Cotard's syndrome. Mind & Brain, the Journal of Psychiatry 01/2011; 2(1):67-72.

[5]. G. E. Berrios* and R. Luque. Cotard's syndrome: analysis of 100 cases. ActaPsychiatricaScandinavica .Volume 91, Issue 3, pages 185–188, March 1995

[6]. GojendraSenjam,Yumnam Sana Devi, N.Heramani Singh. Bipolar Disorder and Cotard's Syndrome-A Case Report and Review. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 13, Issue 8 Ver. V (Aug. 2014), PP 08-10

[7]. Andreas ReifWaldemar M. Murach Bruno Pfuhlmann. Delusional Paralysis: An Unusual Variant of Cotard's Syndrome. Psychopathology 2003;36:218–220 DOI: 10.1159/000072793

[8]. Wani ZA, Khan AW, Baba AA, Khan HA, Wani QA, Taploo R. Cotard's syndrome and delayed diagnosis in Kashmir, India. *International Journal of Mental Health Systems*. 2008; 2:1. doi:10.1186/1752-4458-2-1.

[9]. Pearn J, Gardner-Thorpe C. Jules Cotard (1840-1889): his life and the unique syndrome which bears his name. Neurology 2002. May 14: 58(9): 1400-3

[10]. Pedro Simpson, Eva Kaul, Davin Quinn, Cotard's Syndrome with Catatonia: A Case Presentation and Discussion. The Academy of Psychosomatic Medicine. March-April 2013, Volume 54, Issue 2, Pages 196-199.

[11]. Eben L. McClenahan, James R. Westphal. Depressed, delusional, and 'dead'. Current Psychiatry. Vol. 5, No. 7 / July 2006

[12]. Anders helldénand colleagues.Death delusion.*BMJ* 2007; 335 doi:http://dx.doi.org/10.1136/bmj.39408.393137

[13]. Swamy N.C. Kudlur, Sanju George, Mathew Jaimon. An overview of the neurological correlates of Cotard syndrome.Eur. J. Psychiat. v.21 n.2 Zaragoza abr.-jun. 2007

[14]. Yamada K, Katsuragi S, Fujii I. A case study of Cotard's syndrome: stages and diagnosis.ActaPsychiatr Scand. 1999 Nov; 100(5):396-9

[15]. SAVITHASRI V. ERANTI, DECLAN M. McLOUGHLIN. Electroconvulsive therapy — state of the art. The British Journal of Psychiatry Jan 2003, 182 (1) 8-9; DOI: 10.1192/bjp.182.1.8

[16]. Electroconvulsive Therapy. Jan 12, 2015. http://emedicine.medscape.com/article/1525957-overview

[17]. Shuko Kondo, Hiroshi Hayashi, Takuya Eguchi, TakanobuOyama, Tadashi Wada, Koichi Otani. Bromocriptine augmentation therapy in a patient with Cotard's syndrome. Progress in Neuro-Psychopharmacology and Biology Psychiatry. Volume 27, issue 4, June 2003, Pages 719–721

[18]. Jen-Hui Chan, Chin-Hung Chen, Debbie Robson, Happy Kuy-lok Tan. Case report: Effective Treatment of Cotard's Syndrome: Quetiapine in Combination with Venlafaxine. Psychiatry and Clinical Neurosciences. Volume 63, Issue 1, pages 125–126, February 2009. DOI: 10.1111/j.1440-1819.2008.01891.

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