Late-Onset Obsessive-Compulsive Disorder With Religious Obsessions

N. A. Uvais, MBBS, DPM[a,*]

Obsessive-compulsive disorder (OCD) is a common psychiatric disorder that usually begins in the mid to late 20s to early 30s.[1] Studies exploring the prevalence of OCD in older adults are few. The Epidemiologic Catchment Area study[2] reported that the prevalence rate of OCD in the ≥65 years age group was 1.2%. Clinical and phenomenologic differences have been reported in geriatric patients with OCD. It is more commonly reported in women, and geriatric patients have more concerns about sins and religiosity compared with their younger counterparts.[3] Obsessive fear of forgetting names was also reported in geriatric OCD cases.[4] Many of the reported cases also had organic etiologies.[4] Here, a case is presented of late-onset OCD in a male patient with no family history of OCD and no structural abnormalities of the brain.

Case Report

Mr A was a 65-year-old married Muslim male farmer, premorbidly well adjusted, who presented with a 1-month history of psychiatric symptoms. He had travelled to Mecca for Hajj (Muslim holy pilgrimage) 1 month ago. Soon after returning home, he started having recurrent blasphemous thoughts regarding God. He had recurrent intrusive thoughts of God being a dog. He also had recurrent intrusive images of holy sites with a dog sitting inside. To reduce the anxiety caused by these thoughts, he recited God's name repeatedly in his mind and continually prayed for forgiveness from God. These symptoms had gradually increased over a 1-month period, causing significant distress and impairment of function. He had no other psychiatric symptoms. He had no past or family history of OCD or any other psychiatric illness. The mental status examination revealed blasphemous obsessive thoughts and obsessive images with compulsive recitation of God's name and prayers. His Yale-Brown Obsessive-Compulsive Scale[5] score was 25. There were no psychotic or depressive features, and his cognitive functions were intact. A diagnosis of OCD was made according to *ICD-10* criteria. He was taking antihypertensive medication (oral amlodipine 5 mg/d). He was initially evaluated by a physician who found no organic causes for his symptoms. His computed tomography scan of the brain was normal. He was started on oral fluoxetine 20 mg/d and oral clonazepam 0.25 mg/d. He reported improvements during follow-up after 2 weeks.

Systematic Review

PubMed was searched for case reports and case series relating to late-onset OCD using the following search terms: *late-onset obsessive-compulsive disorder*, *late-onset OCD*, and *geriatric obsessive-compulsive disorder*. The search was not limited by publication date. Case reports, case series, and letters to the editor containing reports of at least 1 case of late-onset OCD published in English were included. Age at onset of symptoms, gender, types of obsessions and compulsions, details of organicity, treatments received, response, and progression to other neurodegenerative disorders during follow-up were recorded. The purpose of this systematic review was to understand the clinical presentation, associated organicity, treatment response, and progression to other neurodegenerative disorders in late-onset OCD.

The literature search initially returned 99 unique articles. Of the 99 articles reviewed, 84 were excluded for failing to meet the inclusion criteria. Of 15 articles reporting late-onset OCD, 1 article was removed due to non-English language. Fourteen articles[2,4,6–17] were included in the final analysis, containing a total of 18 unique cases. Basic demographic data (age at onset and gender) for each patient were included in all but one article. Data from the case presented here were added to the total number of cases and included in the data analysis.

The mean age of late-onset OCD was 59.88 years, with an age range of 39–78 years. Ten of the 18 reported patients were male (55.55%). The most commonly reported obsessions were obsession of dirt and contamination (44.44%) followed by obsession of need to know (11.11%) and obsessive sexual images (11.11%). The uncommon obsessions reported were obsessive doubts regarding blood sugar levels, blasphemous obsessions, aggressive obsessions, somatic obsessions, obsession of making mistakes, obsession of something terrible will happen, and obsession of falling ill. The compulsions reported were washing (38.88%) and checking (27.77%). The uncommon compulsive acts were compulsive recitation of God's name and repeated prayers. Brain abnormalities were reported in 66.66% of cases. The

[a]Department of Psychiatry, Iqraa International Hospital and Research Centre, Calicut, Kerala, India

*Corresponding author: N. A. Uvais, MBBS, DPM, Iqraa International Hospital and Research Centre, Calicut, Kerala, India (druvaisna@gmail.com).

Prim Care Companion CNS Disord 2023;25(2):22cr03263

To cite: Uvais NA. Late-onset obsessive-compulsive disorder with religious obsessions. *Prim Care Companion CNS Disord.* 2023;25(2):22cr03263.

To share: https://doi.org/10.4088/PCC.22cr03263

Table 1. Reports of Late-Onset Obsessive-Compulsive Disorder (OCD)

Reference	Age at Onset	Gender	Profile of OCD Symptoms	Organicity	Medication	Response	Progression to Other Neurodegenerative Disorder
Bhattacharyya and Khanna[2]	65 y	Male	Obsession of making mistakes, obsessive fear of illness, compulsive recitation of God's name	None	Fluvoxamine 200 mg/d	Good	Not reported
Pompanin et al[6]	50 y	Male	Aggressive obsessions of harming someone and checking rituals	Severe cortical atrophy of the left temporal pole extending to the frontal lobe	Clomipramine 75 mg/d and fluvoxamine 150 mg/d	Partial	Semantic dementia
Bersano et al[7]	57 y	Female	Obsession of dirt and contamination	Brain MRI showed on FLAIR pulse sequences bilateral hippocampal and temporal atrophies with mild right hippocampal sclerosis	Medication and psychotherapy (details not given)	Poor	Primary lateral sclerosis and frontotemporal dementia
Weiss and Jenike[4]	53 y	Female	Obsessions that "something terrible" would happen and checking rituals	Non–contrast-enhanced cranial CT demonstrated diffuse, mild cortical atrophy; focal area of low attenuation was also noted in the head of the left caudate, consistent with a lacunar infarct of uncertain age	Clonazepam 0.25 mg/d	Poor	None
	50 y	Female	Obsessive fears of HIV contamination; checking and washing compulsion	CT scan of the head, done as part of the syncopal workup, revealed abnormal T2 hyperintensities in the bilateral frontal periventricular white matter adjacent to the frontal horns; a hyperintense lesion was also noted in the central pons	Clomipramine and clonazepam (dose not mentioned)	Poor	None
	52 y	Male	Obsession of infection and contamination; washing rituals	CT scan of the head done 2 years prior to admission revealed bilateral hypodense areas in the caudate nuclei, consistent with lacunar infarcts of unclear age	Fluvoxamine 150 mg/d	Poor	None
	62 y	Male	Obsession of "needed to know" and compulsive checking and avoidance behavior	CT scan of the head revealed a 3 x 4 cm wedge-shaped infarct in the posterior right frontal lobe, with extension to the deep subcortical white matter	Clonazepam (dose not mentioned)	Poor	None
	71 y	Male	Obsessive worries about his tongue	None	Lorazepam and diazepam	Poor	None
Tonna et al[8]	62 y	Female	Aggressive obsessions and repetitive doubts related to uttering blasphemous phrases during religious ceremonies	MRI revealed the presence of an arachnoid cyst in the left posterior fossa, with left cerebellar hemisphere winged inward and reduced in size compared to the right hemisphere	Sertraline 200 mg/d and haloperidol 1 mg/d	Good	None
Kumar et al[9]	69 y	Male	Obsessive sexual images and compulsive praying rituals	Brain MRI showed bilateral (including corpus callosum), asymmetric, multifocal white and gray matter lesions, which were non-enhancing and had no mass effect	Clonazepam (0.5 mg/d) and haloperidol (up to 2.5 mg/d)	Poor	None
Özyıldırım et al[10]	75 y	Female	Obsession of dirt and contamination and washing compulsions	None	Citalopram 40 mg/d and mirtazapine 15 mg/d	Good	None
Petrikis et al[11]	66 y	Male	Obsession of dirt and contamination	None	Paroxetine 40 mg/d	Good	None
Velayudhan and Katz[12]	72 y	Female	Obsessive doubts regarding blood sugar levels and subsequent repetitive checking of blood sugar levels	None	Combination of behavior intervention and venlafaxine 300 mg/d	Good	None
Nakaaki et al[13]	40 y	Male	Obsession of dirt and contamination and obsessive doubt; checking and washing compulsions	MRI showed mild bilateral frontal lobe atrophy	SSRIs (dose not mentioned)	Partial	Frontotemporal lobar degeneration

(continued)

Table 1 (continued).

Reference	Age at Onset	Gender	Profile of OCD Symptoms	Organicity	Medication	Response	Progression to Other Neurodegenerative Disorder
Frydman et al[14]	57 y	Female	Obsession of dirt and contamination and washing compulsions	Brain MRI showed reduced caudate and hippocampal volumes and small caudate infarcts bilaterally	Adequate trials of paroxetine, sertraline, fluoxetine, citalopram, and clomipramine alone or augmented by different antipsychotics	Poor	Dementia
Carmin et al[15]	78 y	Male	Obsession of "needed to know" and compulsive checking behavior	MRI was noted to be significant for small, lacunar infarcts in the left basal ganglia	ERP and sertraline 200 mg/d	Good	None
Hegde et al[16]	39 y	Female	Obsessive sexual images	Brain MRI involving T1, T2, and FLAIR sequences showed an arachnoid cyst that was oval and an extra-axial mass lesion in the left fronto-parietal region, with broad base toward the falx	Fluoxetine 20 mg/d	Good	None
Pandit and Vardhan[17]	Not given	Male	Obsession of dirt and contamination	Not done	Sertraline 100 mg/d	Good	None

Abbreviations: CT = computed tomography, ERP = exposure and response prevention, FLAIR = fluid-attenuated inversion recover, MRI = magnetic resonance imaging, SSRI = selective serotonin reuptake inhibitor.

most commonly affected brain areas were frontal region (41.66%) and basal ganglia (33.33%). Multifocal white and gray matter lesions, cerebellar infarcts, and hippocampal and temporal lobe atrophy were the other organic causes. Primarily selective serotonin reuptake inhibitors, clomipramine, and benzodiazepines were used to treat late-onset OCD. Treatment response was good in 8 patients (44.44%), partial in 2 patients (11.11%), and poor in 8 patients (44.44%). Four patients (22.22%) later progressed to dementia. The patient details are summarized in Table 1.

Discussion

OCD is a highly disabling psychiatric disorder, with a lifetime prevalence ranging between 1.5% and 3.5% of the general population with an equal gender distribution.[18] Late-onset OCD, especially after age 65 years, is a rare condition that emerges mostly from a wide range of brain disorders, such as vascular lesions, traumatic brain injuries, central nervous system infections, and neurodegenerative diseases.[4] In our systematic review, we found that 66.66% of patients with OCD had brain abnormalities mostly in the frontal lobe and basal ganglia, which suggests a possible neurodegenerative pathophysiology. Berthier[19] compared cases with OCD acquired secondary to brain injury and "idiopathic" OCD. The former group had a variety of lesions in the frontal, temporal, and cingulate cortices or the basal ganglia and were more likely to have a later onset of symptoms and a negative family history. Functional neuroimaging studies also highlighted the importance of the frontal lobes and striatum in the pathogenesis of OCD by revealing increased metabolic activity in the frontal cortex and striatum of patients with OCD.[20]

Religious obsessions are commonly reported among Muslim patients with OCD. An Egyptian cross-sectional study[21] found that most patients (57.4%) had various religious obsessive-compulsive symptoms. About 44% had doubts regarding religion in general (eg, existence of God), and 11.3% had blasphemous ideas.[21] Other studies[22] also found a high frequency of blasphemous obsessive ideas among Muslim patients. However, there are no reports on the prevalence and phenomenology of obsessions among patients with late-onset OCD.

Published online: March 30, 2023.

Relevant financial relationships: None.

Funding/support: None.

Patient consent: Consent was received from the patient to publish the case report, and information was de-identified to protect anonymity.

REFERENCES

1. Martin P. The epidemiology of anxiety disorders: a review. *Dialogues Clin Neurosci.* 2003;5(3):281–298.
2. Bhattacharyya S, Khanna S. Late onset OCD. *Aust N Z J Psychiatry.* 2004;38(6):477–478.
3. Kohn R, Westlake RJ, Rasmussen SA, et al. Clinical features of obsessive-compulsive disorder in elderly patients. *Am J Geriatr Psychiatry.* 1997;5(3):211–215.
4. Weiss AP, Jenike MA. Late-onset obsessive-compulsive disorder: a case series. *J Neuropsychiatry Clin Neurosci.* 2000;12(2):265–268.
5. Goodman WK, Price LH, Rasmussen SA, et al. The Yale-Brown Obsessive-Compulsive Scale. I. Development, use, and reliability. *Arch Gen Psychiatry.* 1989;46(11):1006–1011.
6. Pompanin S, Perini G, Toffanin T, et al. Late-onset OCD as presenting manifestation of semantic dementia. *Gen Hosp Psychiatry.* 2012;34(1):102.e1–102.e4.
7. Bersano E, Sarnelli MF, Solara V, et al. A case of late-onset OCD developing PLS and FTD. *Amyotroph Lateral Scler Frontotemporal Degener.* 2018;19(5-6):463–465.
8. Tonna M, Ottoni R, Ossola P, et al. Late-onset obsessive-compulsive disorder associated with left cerebellar lesion. *Cerebellum.* 2014;13(4):531–535.
9. Kumar V, Chakrabarti S, Modi M, et al. Late-onset obsessive compulsive disorder associated with possible gliomatosis cerebri. *World J Biol Psychiatry.* 2009;10(4 Pt 2):636–639.

10. Özyıldırım I, Kösecioğlu S, Serbetçi BŞ. Very late-onset obsessive compulsive disorder not related to intracerebral lesions; a case report. *Prog Neuropsychopharmacol Biol Psychiatry*. 2011;35(1):282–283.
11. Petrikis P, Andreou C, Pitsavas A, et al. Late-onset obsessive-compulsive disorder without evidence of focal cerebral lesions: a case report. *J Neuropsychiatry Clin Neurosci*. 2004;16(1):116–117.
12. Velayudhan L, Katz AW. Late-onset obsessive-compulsive disorder: the role of stressful life events. *Int Psychogeriatr*. 2006;18(2):341–344.
13. Nakaaki S, Murata Y, Shinagawa Y, et al. A case of late-onset obsessive compulsive disorder developing frontotemporal lobar degeneration. *J Neuropsychiatry Clin Neurosci*. 2007;19(4):487–488.
14. Frydman I, Ferreira-Garcia R, Borges MC, et al. Dementia developing in late-onset and treatment-refractory obsessive-compulsive disorder. *Cogn Behav Neurol*. 2010;23(3):205–208.
15. Carmin CN, Wiegartz PS, Yunus U, et al. Treatment of late-onset OCD following basal ganglia infarct. *Depress Anxiety*. 2002;15(2):87–90.
16. Hegde A, Ghosh A, Grover S, et al. Arachnoid cyst masquerades as late onset obsessive-compulsive disorder. *Gen Hosp Psychiatry*. 2014;36(1):125.e7–125.e9.
17. Pandit L, Vardhan V. Late-onset obsessive-compulsive disorder presenting as genital self-mutilation. *Aust N Z J Psychiatry*. 2013;47(10):969–970.
18. Dell'Osso B, Benatti B, Rodriguez CI, et al. Obsessive-compulsive disorder in the elderly: a report from the International College of Obsessive-Compulsive Spectrum Disorders (ICOCS). *Eur Psychiatry*. 2017;45:36–40.
19. Berthier ML. Funcionamiento cognitivo en el trastorno obsesivo-compulsivo asociado a lesiones cerebrales. (Cognitive function in the obsessive-compulsive disorder associated with cerebral lesions) *Rev Neurol*. 2000;30(8):769–772 [Spanish].
20. Maia TV, Cooney RE, Peterson BS. The neural bases of obsessive-compulsive disorder in children and adults. *Dev Psychopathol*. 2008;20(4):1251–1283.
21. Soliman E, Abohendy W, Fayed A. Phenomenology of religious obsessive: compulsive disorder. *Eur Psychiatry*. 2017;41(S1):S325–S326.
22. Nicolini H, Salin-Pascual R, Cabrera B, et al. Influence of culture in obsessive-compulsive disorder and its treatment. *Curr Psychiatry Rev*. 2017;13(4):285–292.