

TABLE 1.

**DASH Program Data from May–December 2019**

Variable	n (%)
Number of students	20
Number of consultations	93
Undergraduate	15 (75%)
Post-graduate	5 (25%)
Number of students with suicidal risk	5 (25%)

DASH: Distress and Suicide Prevention Help.

were identified in distress were provided teleconsultations.

Several Western countries provide dedicated “student clinics and mental health services,” which may levy significant infrastructure and human resource costs. Our model provides evidence that approachable mental health services can be set up for students on Indian university campuses. Our experience also provides prima facie evidence that mental health services can be established considering

the perceived barriers to help-seeking amongst university students.

**Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Funding**

The authors received no financial support for the research, authorship, and/or publication of this article.

**ORCID iD**

Jagdish Varma  <https://orcid.org/0000-0002-0317-4669>

**Jagdish Varma<sup>1</sup>, Anusha Prabhakaran<sup>1</sup>, Himanshu Sharma<sup>1</sup> and Ankur Mahida<sup>1</sup>**

<sup>1</sup>Dept. of Psychiatry, Pramukhswami Medical College, Bhaikaka University, Karamsad, Gujarat, India

**Address for correspondence:**

Jagdish Varma, Dept. of Psychiatry, Pramukhswami Medical College, Bhaikaka University, Karamsad, Gujarat 388325, India. E-mail: jagdishrv@charutarhealth.org

Submitted: 8 Jun. 2021

Accepted: 24 Sep. 2021

Published Online: 11 Jan. 2022

**References**

1. Menon V, Sarkar S, and Kumar S. Barriers to healthcare seeking among medical students: a cross-sectional study from South India. *Postgrad Med J* 2015; 91: 477–482.
2. Vankar JR, Prabhakaran A, and Sharma H. Depression and stigma in medical students at a private medical college. *Indian J Psychol Med* 2014; 36: 246–254.
3. Arun P, Ramamurthy P, and Thilakan P. Indian medical students with depression, anxiety, and suicidal behavior: why do they not seek treatment? *Indian J Psychol Med* 2021, <https://doi.org/10.1177%2F0253717620982326>
4. Chew-Graham CA, Rogers A, and Yassin N. “I wouldn’t want it on my CV or their records”: medical students’ experiences of help-seeking for mental health problems. *Med Educ* 2003; 37: 873–880.
5. Winter RI, Patel R, and Norman RI. A qualitative exploration of the help-seeking behaviors of students who experience psychological distress around assessment at medical school. *Acad Psychiatry* 2017; 41: 477–485.
6. Cross R. *Remote psychological first aid during the COVID-19 outbreak: interim guidance*. Copenhagen: International Federation of Red Cross and Red Crescent Societies, 2020.

**HOW TO CITE THIS ARTICLE:** Varma J, Prabhakaran A, Sharma H. and Mahida A. Addressing Confidentiality and Privacy Barrier to Mental Health Help-Seeking amongst University Students: An Experience. *Indian J Psychol Med.* 2022;44(1): 94–95.



Copyright © The Author(s) 2021

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

**ACCESS THIS ARTICLE ONLINE**

Website: [journals.sagepub.com/home/szj](https://journals.sagepub.com/home/szj)  
DOI: 10.1177/02537176211056365

## OCD at the Advent of Fahr’s Disease and Small-World Connectomics: A Case Report

Dear Editor,

Obsessive-compulsive disorder (OCD) is a disabling and chronic neuropsychiatric disorder. Disease burden for OCD ranges 1.2%–3.3%.<sup>1,2</sup> OCD pathophysiology is functionally correlated with basal ganglia dysfunction, particularly cortico-striato-thalamo-cortical (CSTC) circuitry.<sup>3</sup> Interestingly, this CSTC basal ganglia connectome has also been implicated in brain efficiency and resilience.<sup>4</sup> So, despite extensive basal ganglia insults like calcification, some patients are

asymptomatic and never reach the threshold of psychopathology. On the other hand, some patients with basal ganglia calcification present with a spectrum of clinical manifestations (neurological, cognitive, and psychiatric disorders) during varied stages of insult.<sup>5</sup> Attempt has been made to explain this variability by using the “small world” network concept.<sup>6</sup> We are reporting a case who presented with OCD years before the onset of neurological symptoms of Fahr’s disease (recently known as Primary basal ganglia calcification [PBGC]<sup>7</sup>), in the context of “small world connectomics.”

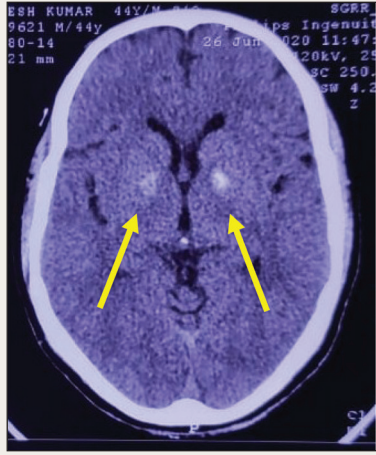
**Case Report**

A 44-year-old Hindu male, a postgraduate, working as a teacher, residing in a suburban area, with anankastic traits

and nil contributory family history, presented two years back (January 2019) with complaints of repeated, irrational, intrusive (ego-dystonic) thoughts and doubts about contamination; persistent, repeated washing; and low mood since 37 years of age. The reason for consultation was an increase in symptoms and dysfunction. On mental status examination, the patient had an anxious affect, obsessive doubts, compulsive acts, and grade 4 insight. Physical examination was within normal limits. The patient was diagnosed with OCD with good or fair insight (as per DSM-5). The Yale Brown Obsessive Compulsive Scale (YBOCS) score was 26. The patient was initiated on psychotherapy (12 sessions of exposure and response prevention) and pharmacotherapy (fluoxetine

FIGURE 1.

### CT Scan Brain Showing Prominent Basal Ganglia Calcification in the Lentiform Nuclei Bilaterally (Demonstrated by Yellow Arrows)



titrated to 80 mg). The patient reported improvement but could not follow up further due to the COVID-19 pandemic first wave crisis and defaulted treatment for a few months.

Subsequently, patient's OCD symptoms (YBOCS: 24) recurred in the last few weeks before another visit (January 2021). The patient also complained of insidious onset of heaviness of head and limb paraesthesia. Subsequent limb stiffness and walking difficulty added to the distress. During this visit, he also reported difficulty in performing day-to-day activities such as buttoning and unbuttoning for a few days. On physical examination, the patient had increased tone in upper and lower limbs, with no other long tract signs. CT scan brain revealed calcification in bilateral basal ganglia (Figure 1). Routine blood investigations (complete blood count, sugar profile, liver function test, kidney function test) were within normal limits. Serum iPTH, calcium, magnesium, phosphorus, thyroid function, and alkaline phosphatase were within normal limits.

On the Extrapyramidal Symptom Rating Scale, the questionnaire score was 5, examination of Parkinsonism and akathisia score was 6, and scores on clinical global impression of Parkinsonism and severity of akathisia were 3 each. Citing recent-onset extrapyramidal symptoms and signs

and abnormal neuroimaging, cognitive screening was done. Mini Mental State Examination and Montreal Cognitive Assessment scores were 29 and 28. Fluoxetine was restarted, citing prior response. Baclofen (30 mg) was initiated as per liaison with the neurology team.

Written informed consent has been obtained from the patient.

## Discussion

To the best of our knowledge, this is the first case in which OCD appeared more than half a decade before the onset of neurological symptoms. Our case fulfills the clinical definition of Fahr's disease, that is, PBGC, with neuropsychiatric and extrapyramidal disorders, and normal calcium and phosphorus metabolism.<sup>7</sup> About 40% of the Fahr's disease probands have neuropsychiatric symptoms.<sup>7</sup> Initial stage of early-onset Fahr's disease generally presents with neuropsychiatric symptoms. Unlike in our case, mood disorders are more commonly encountered at the onset of Fahr's disease.<sup>8</sup> Prior case studies have reported schizo-obsessive disorder with forbidden content and hoarding-like presentations with PBGC.<sup>7-9</sup> In our report, causality (as per Bradford-Hill criteria) could be concluded as "possible" based on plausibility, temporality, and specificity assessments of the association. SSRIs are reported to be associated with extrapyramidal side effects but is a remote possibility in our case (as the neurological symptoms emerged after the treatment was defaulted).

Extensive calcifications lead to reduced blood flow and have been correlated with neuropsychiatric symptoms.<sup>7</sup> Moreover, these calcified deposits have been shown to drive a reactive and mild chronic inflammatory process in the basal ganglia connectome.<sup>5</sup>

This phenotypic variability and progression have been explained by a model known as the "small world" network concept. By small world, we understand that brain is a highly organized functional network. Despite the loss of some nodes, the small world is able to "redistribute the lost function, with an increase in path length, with some loss of efficacy."<sup>6</sup> Studies on OCD subjects, including the ENIGMA-OCD datasets, have found significantly disrupted functional integrity and higher local clustering of the small-world top-down control network.<sup>10</sup> Therefore, an insult to small-world network in Fahr's disease at initial stages

could present as OCD. This could be due to the disharmony between direct and indirect CSTC loops. Further insults would recruit or create randomness in order to manifest other phenotypes in later stages of Fahr's disease.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

### ORCID iDs

Shobit Garg  <https://orcid.org/0000-0001-5913-90211>

Sai Krishna Tikka  <https://orcid.org/0000-0001-9032-1227>

### Shobit Garg<sup>1</sup>, Parth Dutta<sup>1</sup>, Veena Tejan<sup>1</sup> and Sai Krishna Tikka<sup>2</sup>

<sup>1</sup>Dept. of Psychiatry, Shri Guru Ram Rai Institute of Medical and Health Sciences, Dehradun, Uttarakhand, India.

<sup>2</sup>Dept. of Psychiatry, All India Institute of Medical Sciences (AIIMS) Bibinagar, Hyderabad, Telangana, India.

### Address for correspondence:

Shobit Garg, Dept. of Psychiatry, Shri Guru Ram Rai Institute of Medical and Health Sciences, Patel Nagar, Dehradun, Uttarakhand 248001, India. E-mail: shobit.garg@gmail.com

Submitted: 9 May, 2021

Accepted: 20 Jul, 2021

Published Online: 28 Sep, 2021

## References

1. Ruscio AM, Stein DJ, Chiu WT, et al. The epidemiology of obsessive-compulsive disorder in the National Comorbidity Survey Replication. *Mol Psychiatry* 2010; 15(1). DOI:10.1038/mp.2008.94
2. Jaisooriya TS, Janardhan Reddy YC, Nair BS, et al. Prevalence and correlates of obsessive-compulsive disorder and subthreshold obsessive-compulsive disorder among college students in Kerala, India. *Indian J Psychiatry* 2017; 59(1). DOI:10.4103/0019-5545.204438
3. van den Heuvel OA, van Wingen G, Soriano-Mas C, et al. Brain circuitry of

- compulsivity. *Eur Neuropsychopharmacol* 2016; 26(5): 810–827. DOI:10.1016/j.euroneuro.2015.12.005
4. de Oliveira JR and de Oliveira MF. Brain resilience and obsessive-compulsive disorder: Defining the neuroanatomical pathways of vulnerability. *J Neuropsychiatry Clin Neurosci* 2013; 25(4): E19–E21. DOI:10.1176/appi.neuropsych.12090220
  5. Donzuso G, Mostile G, Nicoletti A, and Zappia M. Basal ganglia calcifications (Fahr's syndrome): Related conditions and clinical features. *Neurol Sci* 2019; 40(11): 2251–2263. DOI:10.1007/s10072-019-03998-x
  6. Bullmore E and Sporns O. Complex brain networks: graph theoretical analysis of structural and functional systems. *Nat Rev Neurosci* 2009; 10(3): 186–198. DOI:10.1038/nrn2575
  7. Lauterbach EC, Cummings JL, Duffy J, et al. Neuropsychiatric correlates and treatment of lenticulostriatal diseases: a review of the literature and overview of research opportunities in Huntington's, Wilson's, and Fahr's diseases. A report of the ANPA Committee on Research. American Neuropsychiatric Association. *J Neuropsychiatry Clin Neurosci* 1998; 10(3): 249–266. DOI:10.1176/jnp.10.3.249
  8. Pan B, Liu W, Chen Q, et al. Idiopathic basal ganglia calcification presenting as schizophrenia-like psychosis and obsessive-compulsive symptoms: A case report. *Exp Ther Med* 2015; 10(2): 608–610. DOI:10.3892/etm.2015.2525
  9. Slama F, Amrani H, Leboyer M, et al. Idiopathic basal ganglia calcification and pathological hoarding. *J Neuropsychiatry Clin Neurosci* 2012; 24(2): Eg. DOI: 10.1176/appi.neuropsych.11050108. PMID: 22772709
  10. van den Heuvel OA, Boedhoe PSW, Bertolin S, et al. An overview of the first 5 years of the ENIGMA obsessive-compulsive disorder working group: The power of worldwide collaboration [published online ahead of print, 2020 Mar 10]. *Hum Brain Mapp* 2020. DOI:10.1002/hbm.24972

**HOW TO CITE THIS ARTICLE:** Garg S, Dutta P, Tejan V, Tikka SK. OCD at the Advent of Fahr's Disease and Small-World Connectomics: A 2 Case Report. *Indian J Psychol Med.* 2022;44(1): 95–97.



Copyright © The Author(s) 2021

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-Commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

#### ACCESS THIS ARTICLE ONLINE

Website: [journals.sagepub.com/home/szj](https://journals.sagepub.com/home/szj)  
DOI: 10.1177/02537176211038472

## Clinical Kynanthropy: A Case Report of Psychological Manifestation of a Dog Bite

To the editor,

Manifestations of rabies usually start after 1–3 months of exposure.<sup>1</sup> As the virus begins proliferating in the spinal cord, neuropsychological symptoms can appear.<sup>2</sup> The term “zooanthropy” denotes a person's ability to metamorphose physically into an animal and back again to a human. The term “kynanthropy” was used in ancient Greece for transformation into a dog.<sup>3</sup> The adjective “clinical” was added to distinguish the condition from the actual ability to metamorphose as depicted in classical mythology and demonology. So, “clinical kynanthropy” denotes a person's belief of transformation to a dog.<sup>4</sup> It is a rare variant of delusional misidentification syndrome, particularly reverse inter-metamorphosis, where patients believe they are experiencing transformation or have transformed into an animal.<sup>5</sup> An explanation by “two-factor theory” for Capgras syndrome can be extended to kynanthropy, in which the primary factor for delusion formation is a mismatch in the individual's neural representation

of the self. The second factor is contemplated to be an impairment in the belief evaluation system that precludes the delusional explanation to be rejected.<sup>6</sup> Here, we present differential diagnosis and management of a case who started grinning, barking, and walking on four legs like a dog two years after a dog bite.

### Case Description

A 28-year-old single male, who was average in studies but had dropped out of school after 5th standard due to poverty, currently working in a cloth company as a salesman, was referred from medicine outpatient department (OPD) to psychiatry OPD with complaints of difficulty in swallowing food and fear about dogs. He had been twice bitten by dogs, five years and two years back, following which he had taken a complete course of vaccination. He was apparently alright until two months before the presentation, when, due to the COVID-19-related nationwide lockdown, he read excessively on the internet about dog bites. While going to his native place, he developed a feeling that his tongue is moving like a dog's and began having repetitive thoughts about converting into a dog. Gradually, his sleep reduced to 1–2 hours/day, and he expressed fear that if he sleeps, he might get up as a dog. He sought repeated reassurance from his family that

he hasn't transformed into a dog, to the extent that they got irritated and asked him to see a doctor. These repetitive thoughts would be present for the whole day, and he would chant God's name to get relief from them. Earlier, he also used to check himself in the mirror multiple times, but he had stopped it by the time of the consultation. His uncle informed that he has seen him grinning, barking, and walking like a dog multiple times in the last one month. There was no history of hydrophobia, paralysis, altered-sensorium, persistent sadness or elevation of mood, or substance use. There was no past or family history of any psychiatric, medical, or surgical illness.

His physical examination was within normal limits. On mental status examination, his mood was euthymic, but the affect was anxious. He had repetitive doubts about conversion to a dog and requested for a test to detect that. Somatic obsession and overvalued idea not amounting to delusion were present. Other themes of compulsion were also found, like checking the lock multiple times. On Yale-Brown Obsessive-Compulsive Scale (Y-BOCS), his score was: obsession—12, compulsion—7, and total score—19, indicating moderate obsessive compulsive disorder (OCD). Brown Assessment of Belief Scale (BABS) score was 11 with poor insight. The provisional diagnosis of OCD with