

Clinical Management of Contamination-Subtype Obsessive-Compulsive Disorder Through a Five-Day High-Intensity Integrated Protocol (HIT-OCD): A Single Case Study

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Abstract: *This case study examines the five-day intensive treatment of a 41-year-old woman with contamination-subtype obsessive-compulsive disorder. Care combined medication, exposure and response prevention, deep transcranial magnetic stimulation, yoga, and expressive-arts therapy. Clinical records showed reduced distress during visual and environmental exposure, spontaneous omission of a washing ritual, self-initiated contact with contamination cues, and improved tolerance of difficult ingestion-related tasks. However, distress remained during the most demanding exposures at discharge. The Yale-Brown Obsessive Compulsive Scale was administered twice daily despite its seven-day recall period, producing scores that suggested remission but conflicted with behavioral and observational records. Important gaps were also found in diagnostic history, safety screening, family accommodation, physical health monitoring, and follow-up. The case supports meaningful clinical improvement but does not permit reliable measurement of its size or the contribution of each treatment component. It also highlights the need for suitable outcome measures and complete documentation in short, intensive OCD programmes.*

Keywords: obsessive-compulsive disorder; contamination fears; exposure and response prevention; deep transcranial magnetic stimulation; outcome measurement validity

1. Introduction

This case study documents the supervised clinical management of a 41-year-old woman with established contamination-subtype obsessive-compulsive disorder (OCD) treated through a five-day high-intensity integrated protocol (HIT-OCD) combining pharmacological management, exposure and response prevention (ERP), deep transcranial magnetic stimulation (TMS), structured yoga, and expressive-arts therapy. The treatment was delivered at an outpatient neuromodulation clinic in Hyderabad in July 2026. The intern's role was observational and record-analytic: no assessment was administered, no exposure instruction delivered, and no stimulation device operated.

The report addresses two simultaneous questions. First, what does the clinical record establish about the course and outcome of five-day intensive treatment in contamination-subtype OCD? Second, does the measurement framework, specifically the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) administered twice daily against a seven-day recall frame, permit valid inference from the data? These questions diverge critically in their answers. The case demonstrates clinically meaningful improvement on convergent behavioral indices but reveals a foundational measurement problem intrinsic to intensive-treatment protocols.

2. Background

OCD affects approximately 0.76% of the Indian adult population with a treatment gap exceeding 80% (Gururaj et al., 2016). Exposure expertise remains concentrated in metropolitan centers, making intensive five-day formats a service-delivery solution as much as a clinical one. Intensive

ERP reaches comparable endpoints faster than weekly schedules (Storch et al., 2008).

Contamination-subtype presentations are often disgust-dominant rather than fear-dominant (Rachman, 2004). Disgust encodes a categorical property of a stimulus, namely transfer via contact and oral irreversibility, rather than a probabilistic threat expectancy. Consequently, disgust habituates more slowly than fear, and hierarchies must be ordered by route of contact rather than by objective contamination level (Cisler et al., 2009). First-line treatment combines ERP and serotonin reuptake inhibitors (SRIs); for refractory cases, deep TMS targeting the medial prefrontal and anterior cingulate cortices, which are error-signaling nodes in the cortico-striato-thalamo-cortical (CSTC) loop, provides an alternative (Carmi et al., 2019).

3. Case Presentation

The client was a 41-year-old married woman with an established diagnosis of contamination-subtype OCD, admitted to a five-day outpatient intensive programme in July 2026. Her husband attended as accompanying attender throughout the treatment week. No structured diagnostic history was recorded in the file: age at onset, illness duration, prior treatment history, and family accommodation were not documented.

The protocol combined five components delivered daily: pharmacological management, deep TMS, therapist-led ERP, structured yoga, and expressive-arts therapy comprising music and art sessions. Thirty-four exposure tasks were delivered across the five days, each recorded with a therapist descriptor and a distress rating on a 0 to 10 scale. The Y-

BOCS was administered twice daily, yielding twenty data points, with a baseline total of 29 on Day 1.

Physical parameters were charted on nine occasions. Blood pressure was elevated at every reading (systolic 126 to 156 mm Hg, diastolic 89 to 115 mm Hg), with diastolic values at or above 100 mm Hg on seven of the nine occasions. An antihypertensive was advised on Day 2 and adherence was confirmed on Day 4, but no repeat reading following medication initiation is documented in the file.

The material available for analysis comprised the exposure log, the Y-BOCS record sheets, the music-therapy and art-therapy proformas, the vitals chart, and the consent and screening documents. The electromagnetic compatibility screen was neither completed nor signed. Analysis proceeded by triangulating the exposure log, the arts-therapy observations, and the Y-BOCS record against one another.

4. Exposure Architecture and Disgust-Dominant Presentation

The exposure log of 34 tasks across five days reveals a coherent disgust-dominant structure. Therapist descriptors were nausea, sensation of vomiting, and nauseating feeling; conspicuously absent were palpitations, dread, or fear-of-illness content. Peak distress was organized by route of contact, not objective uncleanness. Ingestion paired with contamination cues produced the ceiling: lunch without hand-washing (10/10 on Day 2) and drinking water beside an unclean lavatory (6/10 on Day 4). Direct lavatory contact produced 8/10, proximity to waste 7/10, ambient contamination 2/10, and visual exposure alone 0 to 3/10. Critically, sewage under active cleaning, the most objectively contaminated stimulus of the week, produced zero distress when the client volunteered for it on Day 4. Between-session habituation was modality-dependent. Visual and ambient exposures achieved near-complete habituation by Day 3, recorded at zero. Ingestion-linked exposures did not: the apex task produced 10/10 resistance on Day 2, 6/10 residual distress on Day 4, and heavy breathing requiring step-by-step instruction on Day 5. On an inhibitory-learning account this is not failure. The client completed the apex tasks and released distress afterwards, which she could not do on Day 2. It reflects the prediction of the disgust literature that peripheral items extinguish readily while core items yield tolerance rather than elimination (Cisler et al., 2009).

Two entries carry particular evidential weight. On Day 2, the therapist recorded that the client did not think of washing her hands before drinking water. This was an amended entry, with the word "forgetting" struck through in favor of the thought not arising, indicating that spontaneous ritual omission rather than mere compliance was occurring. On Day 4, the client volunteered for unscheduled exposure to sewage cleaning at zero distress, indicating self-initiated approach behavior.

5. The Y-BOCS Floor Effect and Measurement Validity

The Y-BOCS was administered twice daily across five days, producing twenty data points. The raw progression reads: Day

1 baseline 29 in the severe range, declining to 3 on Day 3 morning and 0 on Day 5 morning. This represents a 97% reduction, remission several times over, exceeding any published outcome for deep TMS or intensive ERP (Carmi et al., 2019; Olatunji et al., 2013; Mataix-Cols et al., 2016).

This reading is invalid. The Y-BOCS administration frame is the preceding seven days (Goodman et al., 1989). Its items presuppose a period of ordinary living to which ratings refer, which is precisely what a five-day intensive protocol abolishes. Administered twice daily against a seven-day frame, the scale was asked to do something it was not designed to do. Recompile also found the Day 3 morning items summing to two against a recorded total of three.

Three independent data streams covering the same five days diverge significantly. The exposure log recorded residual distress of 6/10 on apex tasks on Day 4 and heavy breathing on Day 5. The expressive-arts records documented withdrawal, perfectionism, emotional shutdown, sad affect, and avoidance of naming the problem. The Y-BOCS recorded totals of one, one, zero, and one, denoting no time occupied by symptoms, no interference, no distress, and complete control. A single outlier instrument might be attributed to trait severity versus state distress; a third independent, non-exposure record, namely the arts observations, converging with the exposure log removes that explanation. The Y-BOCS produced a false certainty.

6. Formulation and Outcome

The presentation is contamination-subtype OCD, disgust-dominant, with contamination understood as transferring by contact and irreversible where the route is oral entry. The maintaining mechanism is a negative reinforcement loop: contact produces disgust, avoidance terminates it, and termination strengthens the behavior while preventing discovery that disgust would have subsided (Abramowitz et al., 2009). The five-day protocol addressed both the behavioral contingency through ERP and the error-signaling substrate through deep TMS targeting the CSTC loop while that circuit was active under exposure.

Outcome is stated in terms the record will bear. Clinically meaningful improvement occurred, evidenced by convergent indices. First, distress on visual and ambient exposures collapsed to zero by Day 3. Second, within-session habituation ran from 10 to 5 on Day 1 and from 7 to 2 on Day 4. Third, a washing ritual was spontaneously omitted on Day 2. Fourth, contamination was self-approached on Day 4. Fifth, apex ingestion tasks were completed on Day 5 with distress released afterwards, which was not possible on Day 2. Residual symptomatology at discharge, comprising 6/10 on an apex task and behavioral evidence of residual distress, is part of the outcome and not an omission. The client improved and remained symptomatic. The magnitude cannot be quantified from the Y-BOCS as administered.

The music-therapy record documented a coherent cluster of social-evaluative and performance anxiety, which is not plausibly a manifestation of contamination OCD, although threshold cannot be determined from observation alone. The art-therapy record documented sad affect, emotional

shutdown, and constricted color use, indicating a depressive dimension the file nowhere assessed. Comorbid depression is common in adult OCD and worsens ERP outcome (Abramowitz et al., 2009; Olatunji et al., 2013). Perfectionism was marked on both arts proformas. The client left with newly commenced antihypertensive medication and blood pressure outside normal range at every reading, a physical finding requiring follow-up.

7. Limitations and Methodological Implications

No structured diagnostic history was documented, so age at onset, duration, prior treatment, and family accommodation are unknown. The design is a single uncontrolled case of a five-component package, so no inference about individual component contribution is available. No follow-up data were available at the time of writing, so durability is unknown. The electromagnetic compatibility screen was not completed or signed, so safety screening cannot be evidenced. The family-accommodation field was blank despite the husband serving as attender throughout, a serious omission, since accommodation is the principal mechanism by which treatment gains are lost on return home.

The central methodological finding is that intensive protocols create a measurement problem intrinsic, not incidental, to their design. Standard severity instruments presuppose a recall period of ordinary living, which a five-day protocol abolishes. In such designs, the behavioral log and observational record are the primary evidence, sufficient to describe a treatment process but inadequate, alone, to quantify an outcome. A valid outcome statement requires a single Y-BOCS administered at the first monthly review against the standard seven-day frame.

8. Conclusion

Clinically meaningful improvement occurred over five days of integrated treatment combining pharmacology, deep TMS, intensive ERP, structured yoga, and expressive-arts intervention. Residual distress persisted at the apex of the disgust hierarchy at discharge, in the manner the disgust literature predicts. The Y-BOCS, administered twice daily against a seven-day recall frame, produced a false picture of remission. Documentation practices matter clinically and analytically: unsigned screens, undated consents, and blank history fields constrain what can be said about treatment later. Finally, the relationship carrying exposure, the moment a client resists, is encouraged, then completes a task she found unbearable, conveys clinical work that no protocol document describes. This was the most instructive aspect of the internship.

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