CARE Checklist — Supplementary Table

Rapid Remission of Severe Type 2 Diabetes in a South Asian Male Using a Structured Lifestyle Approach: A Case Report

Kabir Sethi

#	Item	Checklist Question	Present?	Location in Manuscript
1	Title	The diagnosis or intervention of primary focus followed by the words “case report”	**Present**	Title page — "Rapid Remission of Severe Type 2 Diabetes in a South Asian Male Using a Structured Lifestyle Approach: A Case Report"
2	Keywords	2 to 5 key words that identify diagnoses or interventions in this case report (including "case report").	**Present**	Keywords section — Type 2 Diabetes Mellitus, Diabetes Remission, HbA1c, Nonpharmacological Intervention, Lifestyle Medicine, Case Report
3a	Abstract: Introduction	Introduction: What is unique about this case and what does it add to the scientific literature?	**Present**	Abstract — Rapid HbA1c normalization (12.0% to 5.3%) over 16 weeks without glucose-lowering pharmacotherapy; meets 2021 ADA consensus criteria for diabetes remission, sustained at 44 weeks.
3b	Abstract: Patient	Main symptoms/concerns and/or important clinical findings	**Present**	Abstract — Severe T2DM (HbA1c 12.0%), severe hypertriglyceridemia (619 mg/dL), Class II obesity (BMI 35.3), South Asian male, US resident.
3c	Abstract: Diagnoses/ Interventions/ Outcomes	The main diagnoses, therapeutic interventions, and outcomes.	**Present**	Abstract — T2DM diagnosis; 16-rule structured lifestyle approach (Insulight Protocol); HbA1c 5.3% at 16 and 44 weeks without glucose-lowering pharmacotherapy.
3d	Abstract: Conclusion	What is the main "take-away" lesson(s) from this case?	**Present**	Abstract — Magnitude, velocity, and durability of glycemic improvement support further investigation in larger and more diverse populations.
4	Introduction	One or two paragraphs summarizing why this case is unique (may include references)	**Present**	Introduction — Rapid normalization of severe hyperglycemia through nonpharmacological means is uncommon in clinical practice; contextualizes against DiRECT trial outcomes and standard pharmacotherapy benchmarks.
5a	Patient Information: Demographics	De-identified patient-specific information	**Present**	Methods (Participant) — 50-year-old South Asian male, US resident; de-identified throughout.
5b	Patient Information: Symptoms	Primary concerns and symptoms of the patient	**Present**	Methods (Participant) — Sudden onset blurred vision; chronic polydipsia (excessive thirst); palmar pruritus (itchy palms);

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				pronounced cognitive fatigue; unintentional weight loss (246 lbs to 229 lbs, Aug–Nov 2024).
5c	Patient Information: History	Medical, family, and psychosocial history including relevant genetic information	**Present**	Methods (Participant) — Hypertension (Losartan 50 mg, >20 years); sedentary lifestyle; high glycemic dietary pattern; multiple family members diagnosed with diabetes (increased genetic susceptibility).
5d	Patient Information: Past Interventions	Relevant past interventions with outcomes	**Present**	Methods (Participant) — No prior pharmacological treatment for diabetes; Losartan 50 mg unchanged throughout the 44-week observation period; no lipid-lowering, glucose-lowering, or anticoagulant medications at any point.
6	Clinical Findings	Describe significant physical examination and important clinical findings	**Present**	Methods (Participant) — HbA1c 12.0%; fasting glucose 342 mg/dL; triglycerides 619 mg/dL (>4x upper limit); weight 229 lbs; height 5'8"; BMI 35.3; waist circumference 42 inches at baseline.
7	Timeline	Historical and current information from this episode of care organized as a timeline	**Present**	Methods (Research Design) — Week 1: 8 foundation rules introduced; Week 4: 6 TRE/recovery rules added; Week 15: HbA1c reaches non-diabetic range (5.3%); Week 16: maintenance phase begins (2 additional rules); Week 23: musculoskeletal injury (10-week reduction in physical activity); Week 44: observation ends.
8a	Diagnostic Assessment: Methods	Diagnostic testing (physical exam, laboratory testing, imaging, surveys).	**Present**	Methods (Data Collection) — HbA1c, fasting plasma glucose, serum triglycerides, HDL, LDL, ALT, AST at three time points; all laboratory values cross-referenced with physician clinical records to confirm accuracy.
8b	Diagnostic Assessment: Challenges	Diagnostic challenges (such as access to testing, financial or cultural)	**Present**	Methods (Participant) — Renal markers, fasting insulin, C-peptide, ketones, and autoimmune markers were not assessed; stated explicitly. Waist circumference was self-measured.
8c	Diagnostic Assessment: Diagnosis	Diagnosis (including other diagnoses considered)	**Present**	Methods (Participant) — T2DM with severe hyperglycemia and severe hypertriglyceridemia. South Asian phenotype noted as clinically relevant factor.

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8d	Diagnostic Assessment: Prognosis	Prognostic where applicable	**Present**	Methods (Participant) — South Asian phenotype associated with elevated cardiometabolic risk at lower BMI thresholds; elevated metabolic risk noted when BMI evaluated against Asian-specific standards.
9a	Therapeutic Intervention: Type	Types of therapeutic intervention (pharmacologic, surgical, preventive, self-care).	**Present**	Methods (Research Design) — Nonpharmacological multi-component lifestyle intervention: 16 rules across dietary modification, hydration, physical activity, time-restricted eating, sleep regulation, and adjunctive phytochemical intake.
9b	Therapeutic Intervention: Administration	Administration of therapeutic intervention (dosage, strength, duration)	**Present**	Methods (Rule descriptions and Reproducibility Table) — Specific quantities, timing, and durations documented for each of the 16 rules; example meals and daily schedules provided in Table 2 (Protocol Reproducibility Summary).
9c	Therapeutic Intervention: Changes	Changes in therapeutic interventions with explanations	**Present**	Methods (Research Design) — Phased implementation: foundation phase (Week 1, 8 rules), optimization phase (Week 4, 6 additional rules deferred due to travel), maintenance phase (Week 16, 2 additional rules triggered by laboratory confirmation of glycemic normalization).
10a	Follow-up and Outcomes: Clinician/Patient	Clinician- and patient-assessed outcomes if available	**Present**	Results — HbA1c, fasting glucose, triglycerides, HDL, LDL, ALT, AST at baseline (Nov 2024), 16 weeks (Feb 2025), and 44 weeks (Sept 2025). By 2021 ADA consensus definition, outcomes at 16 weeks meet criteria for remission, sustained at 44 weeks.
10b	Follow-up and Outcomes: Test Results	Important follow-up diagnostic and other test results.	**Present**	Results (Table 1) — Full longitudinal metabolic marker table across three time points; waist circumference self-measured at 42" (baseline), 38" (16 weeks), 35" (44 weeks).
10c	Follow-up and Outcomes: Adherence	Intervention adherence and tolerability. (How was this assessed?)	**Present**	Results (Adherence section) — Daily self-reported adherence tracked per rule in Excel; mean adherence 90% (Weeks 1–15), 76% (Weeks 16–44), 82% overall. Presented as descriptive estimates; self-report bias acknowledged.
10d	Follow-up and Outcomes: Adverse Events	Adverse and unanticipated events	**Present**	Discussion — Musculoskeletal injury at Week 23; 10-week reduction in physical activity (resistance training suspended, walking reduced); coincided temporally with LDL increase to

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				130 mg/dL at Week 44. No recurrence of presenting symptoms during observation period.
11a	Discussion: Strengths and Limitations	Discussion of Strengths and limitations associated with this the approach to this case report	**Present**	Limitations section and Ethics section — Single-subject design; no direct insulin resistance measures; self-reported adherence subject to social desirability bias; investigator is a family member of the subject (bias acknowledged with mitigating factors stated).
11b	Discussion: Medical Literature	Discussion of the relevant medical literature (with references)	**Present**	Discussion and Scientific Foundation — Twin Cycle Hypothesis (Taylor), DiRECT trial, Carbohydrate-Insulin Model, GLUT4 literature, TRE and insulin exposure, HPA axis and cortisol, phytochemical literature.
11c	Discussion: Rationale	The scientific rationale for your conclusions (including assessment of possible causes)	**Present**	Discussion — Findings framed as hypothesis-generating; consistent with prior literature on multi-component lifestyle approaches; causal attribution explicitly disclaimed; other contributing factors acknowledged as not being able to be ruled out.
11d	Discussion: Take-away Lessons	The primary "take-away" lessons from this case report (without references) in a one paragraph conclusion	**Present**	Conclusion — Structured multi-component lifestyle modification may support glycemic normalization meeting remission criteria in selected individuals; dietary consistency may be more readily sustained than physical activity targets; further controlled investigation needed.
12	Patient Perspective	The patient should share their perspective on the treatment(s) they received	**Present**	See Patient Perspective statement below (appended to this checklist).
13	Informed Consent	The patient should give informed consent	**Present**	Ethics section — Written informed consent obtained from the subject. Subject reviewed and approved the final manuscript prior to submission.

Patient Perspective (Item 12)

The following statement was provided by the subject, in written form; the manuscript was reviewed and approved by him prior to submission.

In Nov 2024, when I was diagnosed with diabetes, I was told my HbA1c was 12.0% and that I should begin medication immediately. I chose to try a structured lifestyle approach first, with my physician's agreement that we would reassess in three months. The process was demanding but feasible; it required consistency every single day, careful attention to what I ate and when, and a willingness to restructure routines I had maintained for decades. My family's support was essential. By Week 16, my HbA1c had dropped to 5.3%, and my doctor confirmed I didn't need medication. I have provided permission to use details of my journey and my lab results in the hope that documenting this experience in a rigorous and transparent way may help researchers and clinicians better understand what is possible through lifestyle modification, and may eventually benefit others facing a similar diagnosis.

Note: The subject is a member of the investigator's (author's) family.