

JCHS

Journal of Clinical and Health Sciences

#2
2026

SUPPLEMENTARY ISSUE

Malaysian Obesity Society
MYOS



ND **2 NATIONAL OBESITY SCIENTIFIC CONFERENCE**

ABSTRACT BOOK

11th - 12th April 2026
**Connexion Conference &
Event Centre,**
Kuala Lumpur, Malaysia

Theme
**Obesity as a Treatable
Chronic Disease:
Science, Strategy,
and Success**

Issue **September 2026** | Volume **11** Issue **02 (Supplementary)**
eISSN 0127-984x
jchs-medicine.uitm.edu.my



**UNIVERSITI
TEKNOLOGI
MARA**

PD-57

Short-Term GLP-1–Assisted Metabolic Optimization Improves Reproductive and Endometrial Outcomes in Overweight and Obese Women with PCOS: Two-Year Follow-Up

Maiza Tusimin

Prince Court Medical Centre and Sophea Fertility Centre, Kuala Lumpur, Malaysia

Corresponding Author email: dr.mai@yahoo.com

Introduction:

In women with polycystic ovary syndrome (PCOS), obesity is not merely a metabolic condition but a key driver of infertility, menstrual dysfunction, and endometrial disease. While glucagon-like peptide-1 (GLP-1) receptor agonists are established for weight reduction, real-world evidence demonstrating translation of short-term metabolic intervention into sustained reproductive and endometrial outcomes remains limited.

Objectives:

To evaluate the clinical impact of short-term GLP-1–assisted metabolic optimization on menstrual function, fertility outcomes, and long-term endometrial health in overweight and obese women with PCOS.

Methods:

This prospective observational cohort included 17 Malaysian women with PCOS aged 27–49 years (BMI 28–34 kg/m²) undergoing structured metabolic optimization. Participants were stratified into two clinical groups: (1) reproductive-age women seeking fertility optimization and (2) perimenopausal women with biopsy-proven endometrial hyperplasia. All underwent a short-term GLP-1–based program combined with lifestyle intervention. Reproductive-age participants used contraception during treatment. Outcomes assessed included weight reduction, menstrual regularity, pregnancy outcomes (spontaneous and following frozen embryo transfer[FET]), and resolution and recurrence of endometrial hyperplasia. Participants were followed for up to two years.

Results:

All participants achieved clinically significant weight reduction (approximately 10–12.5%) and restoration of near-normal regular menstrual cycles. During two-year follow-up, five pregnancies were achieved (three following FET and two spontaneous). All three cases of endometrial hyperplasia demonstrated complete histological resolution, with no recurrence observed.

Conclusion:

Short-term GLP-1–assisted metabolic optimization produced durable benefits beyond weight loss, including cycle restoration, successful pregnancies, and sustained reversal of endometrial pathology. These findings demonstrate a clinically meaningful metabolic–reproductive–endometrial continuum and suggest that targeted obesity treatment in PCOS may function as a disease-modifying strategy across the reproductive lifespan.