

## ABSTRAK

**Latar Belakang:** Depot Medroksiprogesteron Asetat (DMPA) sering digunakan sebagai terapi hormonal pasca operasi pada pasien endometriosis. Meskipun memiliki manfaat klinis, dampak DMPA terhadap metabolisme lipid dan risiko aterogenik masih belum pasti.

**Tujuan:** Mengetahui perbedaan parameter profil lipid, termasuk *Atherogenic Index of Plasma* (AIP) antara pasien endometriosis pasca operasi yang diberikan dan tidak diberikan terapi DMPA.

**Metode:** Penelitian komparatif dengan desain *cross-sectional* dilakukan pada Oktober 2025 hingga Maret 2026 pada pasien endometriosis pasca operasi laparotomi atau laparotomi dengan minimal satu ovarium fungsional yang dipertahankan. Karakteristik demografis dan antropometrik di analisis. Kadar trigliserida (TG) dan *high-density lipoprotein cholesterol* (HDL-C) diukur, dan AIP dihitung sebagai  $\log(TG/HDL-C)$ . Parameter lipid dan AIP dibandingkan antara kelompok yang mendapatkan terapi DMPA selama 3 bulan dan kelompok non-DMPA.

**Hasil:** Sebanyak 40 subjek di ikutsertakan, terdiri dari 20 pada kelompok non-DMPA dan 20 pada kelompok DMPA. Karakteristik dasar demografis dan antropometrik sebanding antar kelompok, tanpa perbedaan bermakna pada usia, tinggi badan, berat badan, maupun indeks massa tubuh (IMT) ( $p > 0,05$ ). Tidak ditemukan perbedaan bermakna pada kadar TG, HDL-C, maupun AIP antara kedua kelompok ( $p > 0,05$ ).

**Kesimpulan:** Pemberian DMPA pasca operasi tidak berhubungan secara signifikan dengan perubahan kadar TG, HDL-C, maupun AIP pada pasien endometriosis. Penelitian lebih lanjut diperlukan untuk mengevaluasi efek metabolik jangka panjangnya..

**Kata kunci:** *Atherogenic Index of Plasma* (AIP); Depot Medroksiprogesteron Asetat (DMPA); Endometriosis; *High-density lipoprotein cholesterol* (HDL-C); Trigliserida

## ABSTRACT

**Background:** Depot Medroxyprogesterone Acetate (DMPA) is frequently used as postoperative hormonal therapy in patients with endometriosis. Despite its clinical benefits, the potential impact of DMPA on lipid metabolism and atherogenic risk remains uncertain.

**Objective:** This study aimed to determine the differences in lipid profile parameters, including the Atherogenic Index of Plasma (AIP) between post-operative endometriosis patients who were and were not given DMPA therapy.

**Methods:** This comparative cross-sectional study was conducted from October 2025 to March 2026 in postoperative endometriosis patients who had undergone laparoscopy or laparotomy with at least one preserved functional ovary were included. Baseline demographic and anthropometric characteristics were analyzed. Serum triglyceride (TG) and high-density lipoprotein cholesterol (HDL-C) levels were measured, and AIP was calculated as  $\log(TG/HDL-C)$ . Lipid parameters and AIP were compared between patients who received DMPA therapy for 3 months and non-DMPA.

**Results:** A total of 40 subjects were included, consisting of 20 patients in the non-DMPA group and 20 in the DMPA group. Baseline demographic and anthropometric characteristics were comparable between groups, with no statistically significant differences in age, height, body weight, or body mass index (BMI) ( $p > 0.05$ ). No significant differences were found in TG, HDL-C, or AIP between the two groups ( $p > 0.05$ ).

**Conclusion:** Postoperative DMPA administration was not significantly associated with changes in TG, HDL-C, or AIP in endometriosis patients. Further studies are needed to evaluate its long-term metabolic effects.

**Keywords:** *Atherogenic Index of Plasma (AIP), Depot Medroxyprogesterone Acetate (DMPA), Endometriosis, High-density lipoprotein cholesterol, Triglyceride*