عنوان مقاله:

Effect of dietary approaches to stop hypertension, and standard diets with and without curcumin on interleukin-۱ alpha, ۵-alpha reductase gene expressions, and androgenic and glycemic profile in polycystic ovary syndrome women undergoing in vitro fertilization treatment: A study protocol

محل انتشار:

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خلاصه مقاله:

Background: Polycystic ovary syndrome (PCOS) is one of the most common endocrine diseases with major reproductive and metabolic complications with an impact on public health. Hyperandrogenism and chronic inflammation have been suggested as the leading cause of pathophysiology and clinical manifestations associated with PCOS. It seems that the altered expression of genes involved in the synthesis of pro-inflammatory cytokine and androgens contribute to the promotion of PCOS. Objective: This trial aims to determine the effects of dietary approaches to stop hypertension (DASH) and standard diets with and without curcumin supplementation on the gene expression of interleukin-۱ alpha (IL۱α), ۵α reductase and androgenic and glycemic profile among PCOS patients, who are candidates for in vitro fertilization. Materials and Methods: ۹۶ infertile women with PCOS, aged ۱۸-۴۰ yr, will participate in this randomized, placebo-controlled clinical trial. Based on treatment conditions and body mass index, the participants will be randomly divided into ۴ equal groups using a randomized block design. They will receive a DASH or standard diet containing ۵۲% carbohydrate, ۱۸% protein, and ۳۰% total fat, with the same prescribed sodium, plus ۵۰۰ mg twice daily curcumin or placebo for ۱۲ wk. The mRNA expression of IL-۱α, ۵α reductase, and androgenic

and glycemic profiles will be measured at baseline and at the end of the study. Conclusion: Concomitant administration of DASH diet and curcumin supplementation may reduce IL-۱α, ۵α reductase gene expressions, and improve glycemic and androgenic profiles.

کلمات کلیدی:

Polycystic ovary syndrome, Dietary approaches to stop hypertension, Curcumin, Fertilization in vitro, Gene expression., سندرم تخمدان پلی
کیستیک, رویکردهای غذایی برای توقف فشار خون بالا, کورکومین, لقاح آزمایشگاهی, بیان ژن.

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