

The effect of curcumin plant on polycystic ovary syndrome

Yeganeh Daliryani * , Najmeh Tehranian
daliryanyeganeh1996@gmail.com

Abstract

Polycystic ovary syndrome (PCOS) is a syndrome with complex endocrine and metabolic disorders characterized by chronic ovulation, multiple cysts in the ovaries, and excessive secretion of androgen. In women with PCOS, the amount of LH in the blood also increases, which is due to the increase in the amount and frequency of secretion of this hormone. Polycystic ovary syndrome is a syndrome complicated by endocrine and metabolic disorders. Curcumin is the main compound derived from the root of the plant *Curcuma longa*, and has antioxidant properties and protective effects on the liver. Curcumin is a substance with antioxidant and anti-inflammatory effects. Curcumin reduces the tissue symptoms of polycystic ovary syndrome, probably due to the anti-inflammatory and antioxidant properties of this plant product. Compounds in turmeric, such as curcumin, eliminate oxygen free radicals and increase glutathione concentrations as a compound that counteracts the production of oxygen free radicals, as well as the oxidative chemical changes of lipids, nucleic acids, and proteins. Decreased testosterone, decreased follicular sheath thickness, and increased corpus luteum in the ovaries treated with curcumin increase the fertility rate of polycystic ovary syndrome. Curcumin, with its antioxidant and anti-inflammatory effects, is likely to reduce the symptoms of PCOS and restart ovulation. This syndrome also affects liver tissue and leads to necrosis, fibrosis and liver cirrhosis. Studies show that this curcumin inhibits various stages of the transcription network and thus prevents cell proliferation.

Keywords: Curcumin, POCD, Antioxidant.