

Biochemistry 2021: Evaluate the effect of Metformin treatment on homocystein, lipid profile and C-reactive protein as atherosclerotic marker in patients with polycystic ovarian syndrome- Mutaz Sabah Ahmeid- Tikrit University, Iraq

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Abstract

Background: Polycystic ovary syndrome (PCOS) has a diverse range of the causes that are not entirely understood, but there is evidence that it is largely a genetic disease. The most common immediate symptoms are anovulation, excess androgenic hormones and the insulin resistance. Insulin resistance is associated with obesity, type-2 diabetes and high cholesterol level. The severity of PCOS symptoms appears to be largely determined by factors such as obesity. Reducing insulin resistance by improving insulin sensitivity through a medication such as Metformin seems to show effectiveness. The dyslipidemia may occur independently of obesity; however there is synergistic effect of obesity and insulin resistance in PCOS analogous to that seen in type-2 diabetes. Serum levels of C-reactive protein an atherosclerotic inflammatory marker, may predict the development of cardiovascular disease and within the last years; homocystein taken its place among other major risk factors such as cholesterol and obesity.

Aim: To assess the level of homocystein, lipid profile and C-reactive protein in PCOS patients before and after three months of treatment with Metformin.

Method: This study including 61 PCOS patients were recruited from the gynecological out patient's clinic of Kirkuk General Hospital from January to September 2016. Thirty (30) patients from them received Metformin as only treatment for three months.

Results: There was a significant decrease in serum level of total cholesterol, LDL and CRP, but non-significant change in the serum homocystein, TG, HDL and VLDL after treatment with Metformin.

Biography

Mutaz Sabah Ahmeid has completed his PhD in Clinical Biochemistry from Baghdad University in 2011 and has obtained Higher Diploma in Assisted Reproductive Technique in 2013. He is an Assistant Professor in College of Medicine in Tikrit University and had many research in infertility field.

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