

University Of Baghdad	
Alkindy College Of Medicine/ Research Module	
Full name of students:	1.Hayder Tariq Rasheed حيدر طارق رشيد 2. Athraa Abdulredha Baqir عذراء عبد الرضا باقر 3.Zahraa Hassan Hamad زهراء حسن حامد 4. Tabarak Jamal Kadhim تبارك جمال كاظم
Name of Supervisor	Assist Prof Dr.Ekhlal Khalid Hameed
Year :	2017-2018
Abstract	<p style="text-align: center;">The Association between serum uric acid level and metabolic syndrome</p> <p><u>Background:</u></p> <p>Metabolic syndrome (MetS) is a constellation of interconnected biochemical, clinical, and metabolic factors that directly increases the risk of cardiovascular disease, type 2 diabetes mellitus, and all cause mortality. Insulin resistance, visceral adiposity, atherogenic dyslipidemia, endothelial dysfunction, , hypercoagulable state, and chronic stress are the several factors which constitute the syndrome.</p> <p>Uric acid (UA) is the final product of purine nucleotide catabolism. the association of uric acid and MetS remains controversial given the high prevalence of MetS in the population</p> <p><u>Aim of the study:</u></p> <p>To determine the association between serum UA level and the number of components that contribute to the MetS, and which component was associated most with higher serum UA level.</p> <p><u>Subjects and Methods:</u></p> <p>A cross-sectional study conducted in the obesity unit of Al-kindy College of medicine. 76 female aged between 18-70 years were enrolled in this study who had three, four or five components of the MetS , which was defined according to the third report of the National Cholesterol Education Program Adult Treatment (NCEP) (Panel III). The height, weight, waist,</p>

fasting blood sugar, blood pressure, serum TGs, HDL, and Serum UA were measured according to standardized protocol.

Result:

The prevalence of hyperuricemia among participants was 18 (23.68%). and DSP and a FBG, TG, Hyperuricemic patients had a higher mean WC, lower serum HDL level, the difference were statistically significant for WC, FBG and HDL (P=0.028, P=0.034, P=0.028 respectively). There is statistically significant positive correlation between serum UA and TG, WC and FBG while the correlation with serum HDL was significant negative correlation.

Conclusion:

Serum uric acid is clearly associated with the components of the MetS, considering the rising incidence of obesity and metabolic syndrome worldwide and the potential link to hyperuricemia, more emphasis should be put on the growing prevalence of hyperuricemia.

Supervisor Name & Signature

Assist Prof Dr.Ekhlal Khalid

Module Coordinator

Prof Dr. Huda Adnan