

EVALUATION OF ARTERIAL STIFFNESS WITH PLASMA GGT LEVELS AND PULSE WAVE VELOCITY MEASUREMENT IN PATIENTS WITH FMF

Sena Memnune Ulu¹, Filiz Yılmaz¹, Ahmet Ahsen¹, Önder Akci², Seref Yuksel¹

¹Nephrology, Afyon Kocatepe University, Afyon, Turkey

²Cardiology, Afyon Kocatepe University, Afyon, Turkey

Objectives:

Pulse wave velocity (PWV) is a noninvasive ultrasound technique used to evaluate the arterial elasticity, which is an early indicator of atherosclerosis. Lately, GGT is being thought as a determiner of arterial stiffness (AS). In this study, we aimed to evaluate the relationship between the GGT levels and AS with pulse wave velocity in patients with Familial Mediterranean fever (FMF).

Methods:

The study was included 60 patients with FMF and 40 healthy volunteers. The duration of FMF, the time and dosage of colchicine treatment were recorded. Genetic analysis of the patients were performed. AS was assessed by PWV and after the measurement of PWV; the presence of AS was determined according to the age of the participants in accordance with the recommendations of "The Reference Values for Arterial Stiffness' Collaboration

Results:

PWV, AS frequency and Plasma GGT levels were significantly higher in patients with FMF compared with the control group ($p < 0,001$), ($p < 0,001$), ($p = 0,004$) respectively. In the correlation analysis, PWV and AS were positively correlated with being FMF ($r = 0,349$, $p < 0,001$); ($r = 0,435$, $p < 0,001$). The FMF duration and being FMF were significantly associated with GGT ($r = 0,300$, $p = 0,02$; $r = 0,199$, $p = 0,047$).

Conclusions:

In this study, it was found that, increased PWV and GGT values in FMF patients may show arterial stiffness. These patients can be followed closely with PWV and easily with GGT as an early indicator of atherosclerosis. So, the cardiovascular risk can be determined in early stages of the disease and it can be possible to take necessary precautions.

References:

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