PEDIATRIC RHEUMATOLOGY

MEETING ABSTRACT Open Access

PW01-018 – Circulating endothelial biomarkers in FMF

I Sari[1*], BO Pamuk[2], S Selcuk[2], G Gokce[2], DL Kozaci[3]

From 7th Congress of International Society of Systemic Auto-Inflammatory Diseases (ISSAID) Lausanne, Switerland. 22-26 May 2013

Introduction

Familial Mediterranean fever (FMF) is a hereditary auto-inflammatory disease that affects the populations with certain ethnic backgrounds. It is characterized by self-limiting febrile attacks of polyserositis. In recent years, some studies reported that FMF patients had increased vascular wall alterations and damage which may be another clinical phenotype of the disease.

Objectives

In the present study, we extensively evaluated biomarkers related with endothelial damage in regularly treated and attack-free FMF patients.

Methods

Forty FMF patients and eighteen healthy controls with no known cardiovascular risk factors were included. All patients were receiving regular colchicine treatment and examinations were performed during attack-free periods. Serum samples were used for the determination of high sensitive C-reactive protein (hs-CRP), tissue factor (TF), tissue plasminogen activator (t-PA) and osteoprotegerin (OPG). Plasma samples were used for the determination of asymmetric dimethylarginine (ADMA) and thrombomodulin (TM).

Results

There were 40 FMF patients (21 M and 19 F, 31 [15-58] years) and18 healthy subjects (11 M and 7 F, 35.5 [19-46] years). The median disease duration was 15 (0.6-45) years. Age, sex distribution, waist circumference, body mass index, smoking status and serum lipids were similar between the patients and controls (P > 0.05). The concentrations of high sensitive C-reactive protein (hs-CRP) was significantly higher in FMF patients compared to controls (hs-CRP: 0.78 [0.03-20.2] vs. 0.15 [0.02-4.71], μg/ml, P = 0.03). Asymmetric dimethylarginine (ADMA), osteoprotegerin (OPG) and thrombomodulin (TM) concentrations were significantly lower in the patients' group compared to those of controls (ADMA: 2.56 [0.84-4.07] vs. 3.26 [0.88-3.63], umol/l, P = 0.04; OPG: 361.5 [50.5-1232] vs. 548.9 [193-1181], pg/ml, P = 0.01; TM: 2.69 [0.92-7.26] vs. 3.59 [2.8-8.3], ng/ml, P = 0.001 respectively). However, von Willebrand factor (vWF), tissue factor (TF) and tissue plasminogen activator (t-PA) levels were similar between the groups (P > 0.05).

Conclusion

In this study we showed that markers related with endothelial injury including ADMA, OPG and TM were significantly down-regulated in FMF patients who were on regular colchicine treatment during attack-free disease state.

Disclosure of interest

None declared.

Authors' details
[1]Rheumatology, Dokuz Eylul University School of Medicine, Konak, Turkey.
[2]Internal Medicine, Bozyaka Training and Research Hospital, Izmir, Turkey.
[3]Biochemistry, Adnan Menderes University School of Medicine, Aydin, Turkey.

Published: 8 November 2013

doi:10.1186/1546-0096-11-S1-A71
Cite this article as: Sari *et al.*: PW01-018 – Circulating endothelial biomarkers in FMF. *Pediatric Rheumatology* 2013 **11**(Suppl 1):A71.

[1]Rheumatology, Dokuz Eylul University School of Medicine, Konak, Turkey
Full list of author information is available at the end of the article