BIOMARKERS OF INFLAMMATION - CARDIOVASCULAR RISK PREDICTORS IN YOUNG PEOPLE
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Introduction
Cardiovascular disease (CVD) is the leading cause of death and disability worldwide [1]. The onset of the cardiovascular disease (CVD) anticipates the symptoms. Biomarkers play a critical role in the definition, prognostication, and decision-making regarding the management of cardiovascular events [2]. In adulthood a number of inflammatory biomarkers are associated with the increased cardiovascular risk, however, these biomarkers are insufficiently studied in the young population [3,4].

Keywords
Biomarkers, cardiovascular disease, cardiovascular risk.

Purpose
To examine the high-sensibility C-reactive protein and IL-6 inflammatory biomarkers in young people.

Material and methods
A cross-cutting study was carried out on 88 young subjects, apparently healthy (Tab.1).

Table.1 General characteristics of the study population

| Variables	Study population (n=88)
Female	65 (73.9%)
Male	23 (26.1%)
Ethnicity	100% Caucasian
Mean age (SD)	19.3 ± 0.2 (17 to 25 age range

Material and methods
The concentration of the inflammatory biomarkers in blood was determined: the high-sensitivity C-reactive protein (hsCRP) by the enzyme-linked immunosorbent assay and IL-6 by the latex-immunoturbidimetry method.

Results
The concentration of hsCRP ranged from 0.01 to 11.10 mg / l, averaging 0.56 ± 0.16 mg / l, with some sex differences: 0.61 ± 0, 14 mg / l in males versus 0.54 ± 0.21 (p <0.05) in females. The IL-6 value ranged from 1.12 to 5.60 (2.23 ± 0.07) pg / ml, the results recorded in male subjects, statistically (2.34 ± 0.17 pg / ml) were significantly higher than in women (2.19 ± 0.07 pg / ml) (p <0.05). An increasing trend of IL-6 and hsCRP with age was registered, however, the differences between age groups ≤ 20 and> 20 years old were insignificant (p> 0.05) (Fig1).

Fig.1. The levevels of Biomarkers.
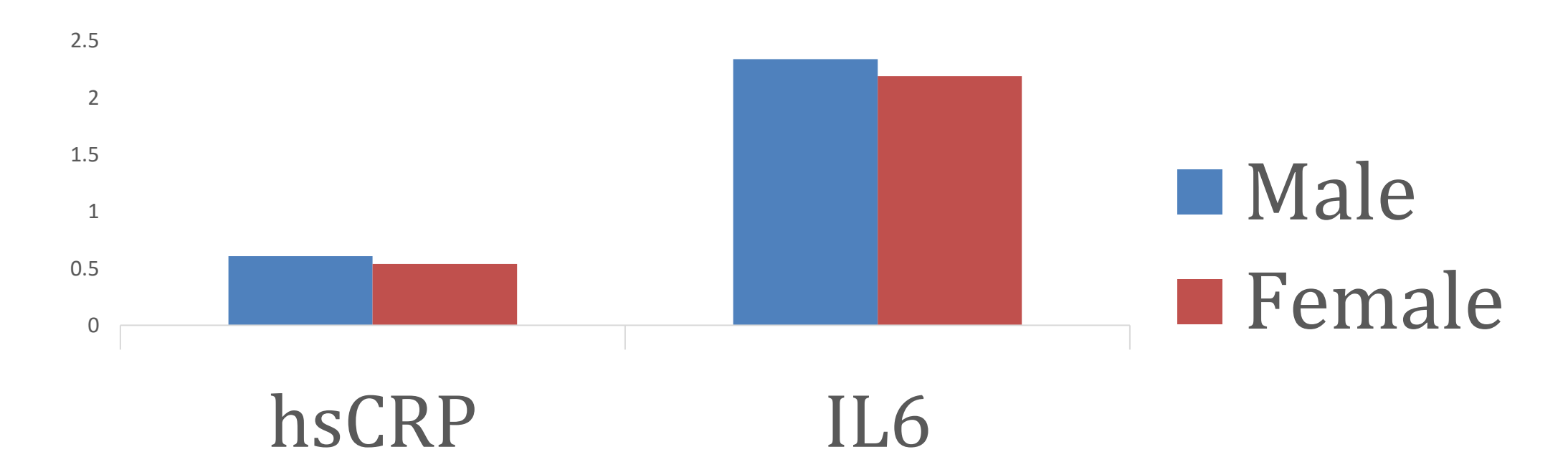
Conclusions
The inflammatory biomarkers have an increasing tendency in concentration with age, being more expressed among men. However, longitudinal studies are needed to assess the role of the studied biomarkers and their value in predicting the cardiovascular risk.

References
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