ABSTRACT

BACKGROUND AND OBJECTIVES

A positive association between platelet indices and the development of acute coronary syndromes has been reported. The aims of the study were to compare the platelet indices in patients with ACS and those with non cardiac chest pain and to study other risk factors which took part in the development of ACS.

METHODS

Ethical committee clearance was obtained. After taking consent eighty five patients with ACS were taken and 85 patients with non cardiac chest pain were selected for the study. All subjects were in the group of 35-70 years. They were further divided into groups based on age, gender, BMI, history of diabetes, total cholesterol, family history, history of hypertension. These groups were studied for influences on ACS. The association of platelet indices such as mean platelet volume (MPV), plateletcrit (PCT), platelet distribution width (PDW) with ACS were studied. The data was analysed by SPSS version 20.0

RESULTS

The mean MPV of study participants with ACS were 12.468. The mean MPV of study non ACS patients were 10.636. The mean PDW of study participants with ACS were 19.134. The mean PDW of study participants...
without ACS were 13.611. The mean PCT of study participants were in ACS patients was 3.1. The mean PCT of study participants who had no acute coronary event were 2.19.

CONCLUSIONS

Platelet indices had significant variation in patients with ACS. Patients of male gender were also presented frequently to the casualty with chest pain and were diagnosed to have ACS than females. Diabetes also significantly contributed to development of ACS. Higher total cholesterol was aculpit in the development of acute cardiac events. A patients BMI was also significant risk factor. Therefore platelet indices can be used as a economic marker of an acute coronary event.

Keywords: platelet indices, ACS