Results There were significant differences between SAP groups and ACS group in terms of PAPP-A (6.39×10^{-3} U/L±4.68×10^{-3} U/l vs 19.30×10^{-3} U/L±12.76×10^{-3} U/L, p<0.05), hs-CRP (0.49 ±0.31 mg/l vs 3.57±2.15 mg/l, p<0.01), NO (57.46±4.07 μmol/l vs 44.54±5.15 μmol/l, p<0.05) and FMD (5.96±0.79% vs 3.30 ±1.20%, p<0.05). Using the method of stepwise multiple linear regression and correlation, at the levels of α=0.10, we found that LnPAPP-A was related to Lnhs-CRP and FMD. The constant of the model is 5.57, unstandardised partial coefficient for Lnhs-CRP is 0.333 (95% CI 0.138 to 0.527, p<0.01), FMD −0.623 (95% CI to 1.144~−0.102, p<0.05), respectively. In patients with elevated PAPP-A levels (>11.094×10^{-3} U/L), hs-CRP was higher (4.18 ±5.31 mg/l vs 0.56±1.32 mg/L, p<0.001) and FMD was lower (3.30±2.40% vs 6.18±3.59%, p<0.05) than those without elevated PAPP-A levels (≤11.094×10^{-3} U/l).

Conclusions Just as CRP regarded as an indirect measure of endothelial function, PAPP-A can act as an indirect method to evaluated endothelial dysfunction in patients with coronary atherosclerosis disease.

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PREGNANCY-ASSOCIATED PLASMA PROTEIN A CAN BE REGARDED AS AN INDIRECT MEASURE OF ENDOTHELIAL FUNCTION IN PATIENTS WITH CORONARY ATHEROSCLEROSIS DISEASE

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Objectives To investigate the relationship between the levels of circulating pregnancy-associated plasma protein A (PAPP-A), a novel marker of atherosclerotic plaque activity, and vascular endothelial function in patients with coronary atherosclerosis disease.

Methods To investigate the relationship between the levels of circulating pregnancy-associated plasma protein A (PAPP-A), a novel marker of atherosclerotic plaque activity, and vascular endothelial function in patients with coronary atherosclerosis disease.