

Majority of medical decisions are based on results of diagnostic tests that help to differentiate normal from abnormal. The choice of appropriate test and its interpretation are necessary steps for correct diagnosis and treatment strategy determination. Rapid prove of acute coronary syndrome (ACS) plays a key role in choice of optimal treatment strategy, because timing of intervention directly influences prognosis of the patient. Pregnancy-associated plasma protein-A (PAPP-A) has been studied as a promising marker of ACS. For PAPP-A evaluation in patients with coronary atherosclerosis, we have chosen commercially available system Kryptor that had been verified in prenatal screening of pregnancies in risk. PAPP-A belongs among metalloproteinases. It is important marker of physiological development of placenta and fetus. The only proven physiological role of PAPP-A is the enabling of bioavailability of insulin-like growth factor (IGF). IGF as a growth factor, plays significant role in atherosclerosis development, but also it might contribute to healing processes connected with tissue injury. Nevertheless, PAPP-A role in plaque destabilization has not been proven yet, although it was found in other metalloproteinases. In our pilot study, we confirmed the use of Kryptor system also for patients with coronary artery disease. In the next step we analyzed influence of concomitant medications, type of invasive procedure and complications on PAPP-A level. We showed that circulating PAPP-A levels are not influenced by type and length of the procedure but they are significantly increased by concomitant heparin administration.