Role of IgG-seropositivity to Chlamydia pneumoniae in early thrombotic events after coronary stent placement.

AIMS: Since infection of endothelial or smooth muscle cells with Chlamydia pneumoniae increased expression of tissue factor and plasminogen activator inhibitor I (PAI-1), C. pneumoniae might be involved in triggering acute thrombotic events in patients with coronary artery disease. Therefore, we explored a potential relationship between IgG-seropositivity to C. pneumoniae and early thrombotic events after coronary stent placement. METHODS AND RESULTS: In a prospective randomized placebo-controlled study 1010 patients with successful coronary stent placement received roxithromycin or placebo for 4 weeks after coronary stent placement, which showed no effect of roxithromycin on early thrombotic events, as expected. Venous blood samples were collected from patients immediately before treatment. Plasma was analyzed for C. pneumoniae-specific IgG antibody levels by microimmuno-fluorescence. Thrombotic events were defined as death, non-fatal myocardial infarction, or urgent target vessel reintervention within 30 days after stent placement. We found no significant difference concerning the frequency of early thrombotic events in patients positive or negative for C. pneumoniae-specific antibodies. If patients were stratified according to their antibody levels, again no significant difference in the frequency of thrombotic events was observed. CONCLUSION: Our
findings do not suggest a role of C. pneumoniae in the development of early complications after stent placement.