Introduction: Acetylsalicylic acid (aspirin) irreversibly prevents platelets aggregation, and is a preventive treatment in atherosclerotic diseases. Aspirin treatment is considered a risk factor predisposing patients undergoing extracorporeal shock wave lithotripsy (SWL) to an increased occurrence of retroperitoneal hematomas. In order to reduce the risk of complications discontinuation of aspirin treatment has been advocated. We evaluated the complications of SWL in patients while being treated with aspirin.

Methods: Forty-five patients, 14 females and 31 males, average age of 64 (range 46-83) years, underwent SWL of upper urinary tract calcified stones, while being treated with aspirin. The indication for aspirin treatment in all patients was ischemic heart disease. Treatments were administrated using the Econolith® (Medispec LTD.) lithotripter. Average number of shocks administered was 2850 (range 2000-3000), intensities of 21-22kV. Two weeks following the SWL patients were evaluated for occurrence of macrohematuria and clinical signs of retroperitoneal hematomas. Imaging studies were performed in 28 patients, (24 ultrasound and 4 computed tomography scans).

Results: None of the patients reported of macrohematuria of more than several days’ duration, requiring intervention or hospitalization. No clinical signs of retroperitoneal bleeding (weakness, dizziness, continuous permanent flank pain, subcutaneous hematomas) were recorded. No signs of intrarenal or perienal hematomas were revealed in imaging studies.

Conclusions: Aspirin discontinuation in every patient before SWL, bearing potential cardiovascular atherosclerotic complications, should be reconsidered. Lack of clinical signs or radiological findings consistent with excessive bleeding in our series demonstrate the possible safety of SWL in patients while being treated with aspirin.