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**THORACOABDOMINAL AORTIC ANEURYSM ENDOVASCULAR REPAIR –  
COMPLICATION ASSOCIATED WITH NON-COMPLIANCE**

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**Introduction.** Thoracoabdominal aortic aneurysm (TAAA) is a complicated aortic disease. Continuous dilation of the descending thoracic aorta extending into the abdominal aorta leads to thoracoabdominal aortic aneurysm. Risk factors for TAAAs are similar to abdominal aortic aneurysm and other cardiovascular diseases and include smoking, hypertension, chronic obstructive pulmonary disease (COPD), obesity and hyperlipidemia. Today there are only two options of surgical treatment of TAAA – open and endovascular repair.

**Aim:** the aim of the study was to demonstrate complication after endovascular repair of TAAA associated with non-compliance after procedure.

**Materials and methods.** A 67-year-old man was admitted to the Department of Vascular Surgery and Transplantation in Białystok for a surgical treatment of an asymptomatic thoracoabdominal aortic aneurysm. Surgeons performed endovascular procedure – implantation of a t-Branch endovascular graft. The surgery went well, there were no postoperative complications and the patient left hospital 4 days after surgery. After approximately one month patient presented to the Emergency Room with nausea and severe pain in lumbar region that started 48 hours prior to his admission. The patient was admitted to Nephrology Department with increased serum creatinine concentration. Computed tomography angiography revealed acute renal arteries occlusion. Vascular surgeons decided to start *catheter-directed thrombolytic therapy*, but after 24 hours procedure was complicated by a major bleeding from the brachial artery, into which the catheter was inserted. It required an urgent surgery later that day. The fibrinolysis was only partly successful, as the right renal artery flow did not improve and diuresis started. Creatinine levels however stayed elevated and the patient required hemodialysis which was associated long period renal ischemia. Two weeks later patient was discharged home, but he remained dialysis-dependent as the end – stage renal disease was diagnosed. After further investigation it turned out that the patient has stopped taking his antiplatelet medication after his first prescription run out. This is what may have caused renal arteries occlusion. Four months later he was admitted to the Vascular Surgery Department for arterio-venous fistula creation for hemodialysis. The patient was placed on kidney transplant waiting list. Nine months later the patient underwent a successful deceased donor kidney transplantation.

**Result and discussion.** All surgeries involve an element of risk. Surgery failure or serious complications may be caused not only by surgical errors but also by factors associated with patient and should be taken into consideration planning endovascular treatment.

**Conclusion.** Endovascular procedures should be performed in patients with high level of compliance, which means that they will correctly follow postoperative instructions and minimize the risk of complications.