

# Infective endocarditis in the course of urosepsis *E. coli* ESBL(+) in a patient with Goodpasture's syndrome

Infekcyjne zapalenie wsierdzia u pacjentki z zespołem Goodpasture'a w przebiegu urosepsy *E. coli* ESBL(+)

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The patient, female, aged 76 years, during dialysis therapy due to rapidly progressing glomerulonephritis, with 90% seizure of glomerules in kidney biopsy, the presence of p-ANCA, and anti-GBM antibodies (double-positive), treated with prednisone, cyclophosphamide, and plasmapheresis (seven treatments in total), was hospitalised because of deterioration of her general condition. On admission to hospital the patient was weakened, with diarrhoea, vomiting, a noticeable decrease in diuresis, but without fever. In laboratory tests the level of procalcitonin was elevated to 126 ng/L and C reactive protein (CRP) to 21.8 mg/L. Based on transthoracic echocardiography (TTE), a suspicion of infective endocarditis was raised. An examination revealed the presence of a hypoechoic mass sized 6.5 mm × 9.3 mm connected with the edge of the anterior leaflet of the mitral valve (Fig. 1A, B). Transoesophageal echocardiography revealed the mitral valve with slight degenerative changes, and a limp, spindly vegetation up to 12 mm long connected with the edge of the anterior leaflet of the mitral valve (Fig. 2). A decision was made to use conservative treatment due to very high operational risk. An empirical antibiotherapy was started with imipenem and ciprofloxacin. According to the antibiogram [*Escherichia coli* ESBL(+)], the antibiotherapy was modified, continuing treatment with imipenem and amikacin. Thanks to improved renal function and abundant diuresis, the patient became independent of dialysis. In the sixth week of treatment a control TTE was made — stable image, with vegetation present in the previous examination. Inflammatory and immune process markers were achieved — CRP 0.9 mg/dL, OB 19 mm/h, anti-GBM(–), and p-ANCA(–). Blood cultures were sterile. Four weeks later TTE was performed and showed a stable image. After six months the patient is in good condition with no symptoms of vasculitis and remains under constant care of nephrology and cardiology clinics, with serum creatinine level 2.6 mg/dL and urea 104 mg/dL. She receives methoxy polyethylene glycol-epoetin beta in doses of 30 μg every four weeks maintaining a haemoglobin level of approximately 11 g%, and prednisone 10 mg/day. To conclude, the patient, in the course of vasculitis and with renal failure requiring haemodialysis, treated with immunosuppression, is burdened with significant risk of developing endocarditis. Long-term conservative therapy is possible only with constant monitoring of clinical status, activity of vasculitis, and imaging valvular changes.

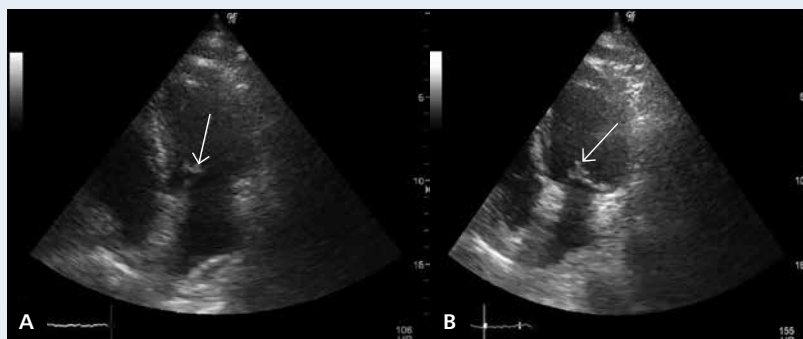


Figure 1. A, B. Transthoracic echocardiography; vegetation associated with mitral valve (arrow)



Figure 2. Transoesophageal echocardiography; mitral valve with slight degenerative changes, spindly vegetation up to 12 mm (arrow)

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**Conflict of interest:** none declared