INFECTIVE ENDOCARDITIS IN A PACIENT WITH DIABETES MELLITUS. CLINICAL CASE

Victoria Preguza, Romeo Grăjdieru, Elena Samohvalov, Alina Istrati, Xenia Spatari, Elena Jacotă, Alexandra Grejdieru
Discipline of Cardiology, USMF „Nicolae Testemiţanu”

Introduction. Infective endocarditis (IE) frequently develops in an immunocompromised patients with multiple comorbidities: diabetes mellitus (DM) (17–30%), hepatitis, liver cirrhosis, renal diseases, cancer, or AIDS. Patients with DM have severely reduced immunity, increasing the risk of bacteremia and sepsis.
Aim of the study. Clinical case presentation of a diabetic patient with infective endocarditis, with a severe course and multiorgan complications, intended to highlight the clinical complexity.
Materials and methods. A 30-year-old man with DM and IE caused by *Streptococcus viridans* post-dental infection, involving the aortic valve (AV), was admitted to the CMH “Holy Trinity”. Anamnesis: dyspnea, retrosternal pain, and low fever. Clinically and paraclinically evaluated by: blood cultures, echocardiography, electrocardiography, clinical and biochemical tests.
Results. Patient with diabetes and hepatitis C virus infection with fever 38.5°C, chills, sweating, fatigue. Objective: pale skin. Rhythmic heart sounds, HR 100 bpm, systolic murmur at apex, BP 120/90 mmHg. Results. *S. viridans* detected in BC. EcoCG: 10 mm mobile vegetations on the aortic valve, grade III AV regurgitation, EF 65%; Hb 110 g/l, erythrocytes: 3,2 $x10^{12}$, leukocytes: 10 $x10^{9}$, ESR 45 mm/hour; ASLO 1:200; ALT 78 mmol/l, urea 10 mmol/l, creatinine 112 mmol/l, RF 48 U/l; CRP 10 U/l. Abdominal USG: hepatomegaly. Combined treatment with 2 antimicrobial drugs in maximum doses, antifungals, beta blockers, diuretics, hepatoprotectors.
Conclusion(s). Infective endocarditis in patients with diabetes progresses with severe renal and vascular complications, which highlights the importance of holistic investigation for early detection of multiorgan involvement, facilitating effective treatment and a favorable prognosis.
Keywords: diabetes mellitus, infective endocarditis, systemic complications.

INFECTIVE ENDOCARDITIS COMPLICATED BY SEPTIC NEPHRITIS. CLINICAL CASE

Xenia Spatari[1], Elena Jacotă[1], Elena Samohvalov[1], Anastasia Spatari[1], Victoria Preguza[1], Alina Istrati[1], Alexandra Grejdieru[1]
[1]Discipline of Cardiology, SMPhU "Nicolae Testemiţanu"

Introduction. Infective endocarditis (IE) is a severe microbial disease that often occurs on the Background. of comorbidities and progresses with multi-organ complications, negatively impacting the disease prognosis. The condition leads to renal dysfunction and may be complicated by embolism and septic nephritis.
Aim of the study. Presentation of a clinical case of streptococcal infective endocarditis complicated by septic nephritis, highlighting the role of early diagnosis and multidisciplinary management.
Materials and methods. A 63-year-old male with prosthetic valve IE caused by group D streptococcus affecting the aortic valve (AoV). Medical history revealed onset with fever, chills, sweating, dyspnea, parasternal pain. He was clinically and paraclinically investigated through blood cultures, ECHO, clinical and biochemical analyses, nephrologist consultation.
Results. Fever 37.7°C, dyspnea, lumbar pain. Objective(s). findings: skin pallor, rhythmic heart sounds, HR 100 bpm, diastolic murmur over the aorta, BP 140/100 mmHg. Paraclinical

findings: blood cultures positive for group D streptococcus. ECHO showed mobile vegetations on the AV (20 mm), grade II aortic regurgitation, EF 57%. Laboratory: Hb 90 g/l, erythrocytes 2.7 x 10^{12}/L, leukocytes 14 x 10^{9}/L, ESR 68 mm/h, urea 10 mmol/L, creatinine 146 µmol/L, RF negative, CRP 61 U/L. Urinalysis revealed leukocyturia, hematuria, and hyaline casts. The patient received three antimicrobial drugs at maximum doses, antifungals, low molecular weight anticoagulants.
Conclusion(s). Streptococcal infective endocarditis (caused by *Streptococcus gallolyticus*, *viridans, β-hemolytic streptococci*) may progress with septic nephritis, worsening the disease prognosis, particularly in elderly patients. Adequate infection treatment is crucial to minimizing the risk of renal impairment.
Keywords: infective endocarditis, septic nephritis, renal involvement.

ECHOCARDIOGRAPHIC FEATURES IN DIAGNOSING AORTIC STENOSIS

Andreea Stratu[1], Elena Samohvalov[1], Alexandra Grejdieru[1]
[1]Discipline of Cardiology, SMPhU „Nicolae Testemiţanu"

Introduction. Aortic stenosis (AS) is a valvular condition that obstructs left ventricular outflow, commonly seen in the elderly and associated with increased morbidity and mortality. Echocardiography remains the standard for early diagnosis, severity assessment, monitoring, and guiding therapeutic management.
Aim of the study. Review of the literature on essential echocardiographic features for the diagnosis and staging of aortic stenosis, as well as the predictive value of parameters in therapeutic decision-making.
Materials and methods. A narrative synthesis of relevant scientific articles from the past five years was performed, using databases such as PubMed, HINARI, Scopus, and SAGE. The following main echocardiographic parameters essential for diagnosis were evaluated: aortic valve area (AVA), peak transvalvular jet velocity (Vmax), and mean pressure gradient.
Results. Research noted that mild stenosis is defined by an AVA >1.5 cm^2 and Vmax <3 m/s, moderate stenosis is characterized by an AVA between 1.0–1.5 cm^2 and Vmax 3–4 m/s, severe stenosis by an AVA <1.0 cm^2, Vmax ≥4 m/s, and a mean gradient ≥40 mmHg. In special forms such as low-flow, low-gradient AS, the AVA is <1.0 cm^2 but with a gradient <40 mmHg, observed in patients with reduced ejection fraction. In these cases, complementary methods like dobutamine stress echocardiography, a functional test for contractility assessment or CT calcium scoring, are necessary to differentiate severe from moderate forms and to guide clinical decisions.
Conclusion(s). Echocardiography enables the early diagnosis of aortic stenosis through the evaluation of AVA, Vmax, and mean gradient, thus facilitating the identification of severe or atypical forms, guiding therapeutic approaches, and supporting decisions regarding the optimal timing of interventional treatment.
Keywords: aortic stenosis, echocardiography, AVA, diagnosis.

EMPIRICAL ANTIMICROBIAN TREATMENT OF THE PATIENT WITH INFECTIOUS ENDOCARDITIS. CLINICAL CASE

Corina Turcu[1], Alina Istrati[1], Elena Samohvalov[1], Elena Panfile[2], Valeria Gaina[1], Ana Simon[1], Alexandra Grejdieru[1]
[1]Discipline of Cardiology, SMPhU "Nicolae Testemiţanu"
[2]Institute of Cardiology, Department of Acquired Malformations