



Oddelenia všeobecnej
kardiológie SÚSCCH a.s , II. Klinika
kardiológie a angiológie LF SZU

„Srdce v obraze“



Lovišková Zuzana, Uliana Plovaiko

XIV. Stredoslovenský kardiologický deň Banská Bystrica -24.október
2024

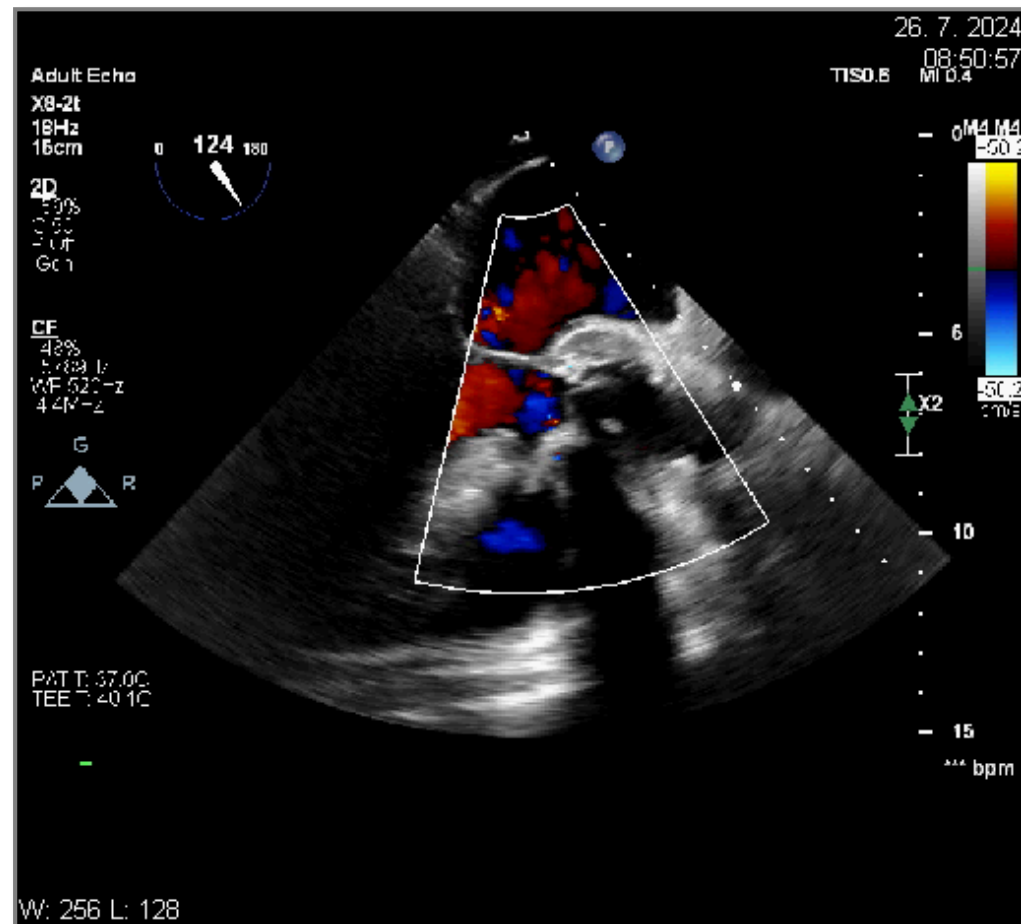
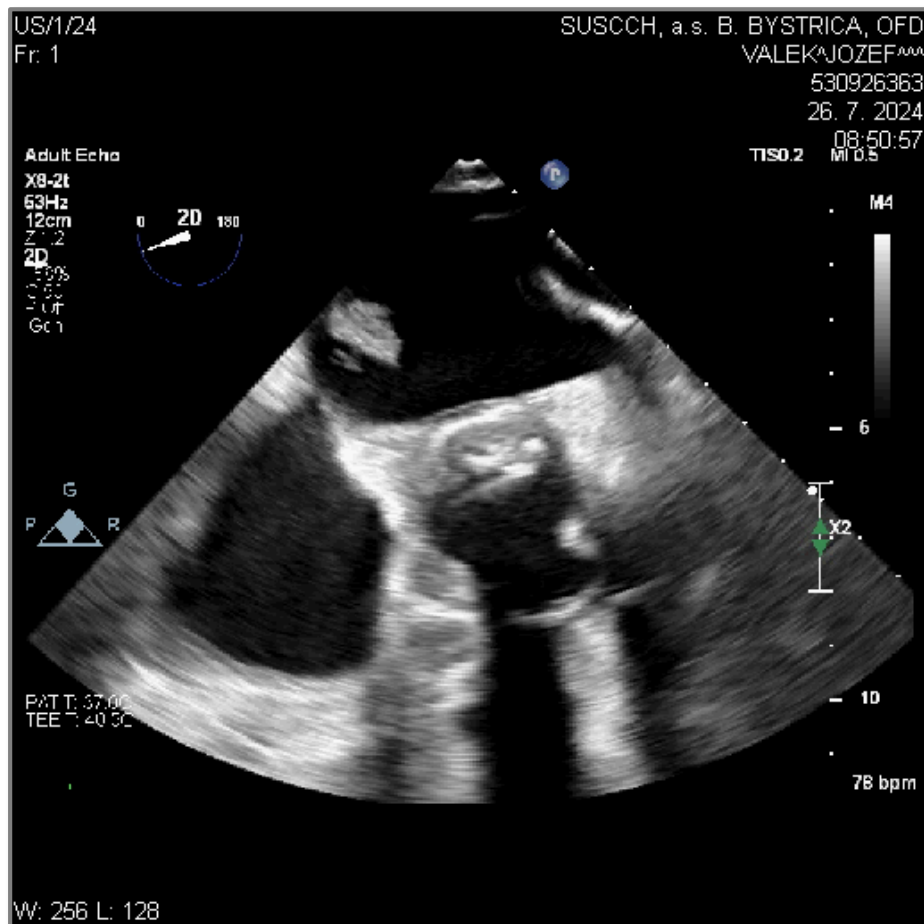


Kazuistika č. 1

- Pacient narodený v r. 1953
- O.A. art. hypertenzia, hepatomegalia s hepatopatiou, steatoza pečene, exogenna obezita
- V r. 2010 NÚSCH Bratislava výmena aortálnej chlopne bioprotézou(Mosaic ultra N23) pre kombinovanú závažnú aortálnu chybu – dispenzár kardiológom, posledná 04/24
- 06-07/24 Int.odd. Liptovský Mikuláš a následne Bojnice – kard. dekompenzácia, zápalový proces, najskôr urolog. etiologie, pozitívna HK Enterococcu faecalis – preliečený ciprofloxacín + cefixim, amoxicilín s kys. klavulánovou + levofloxacín

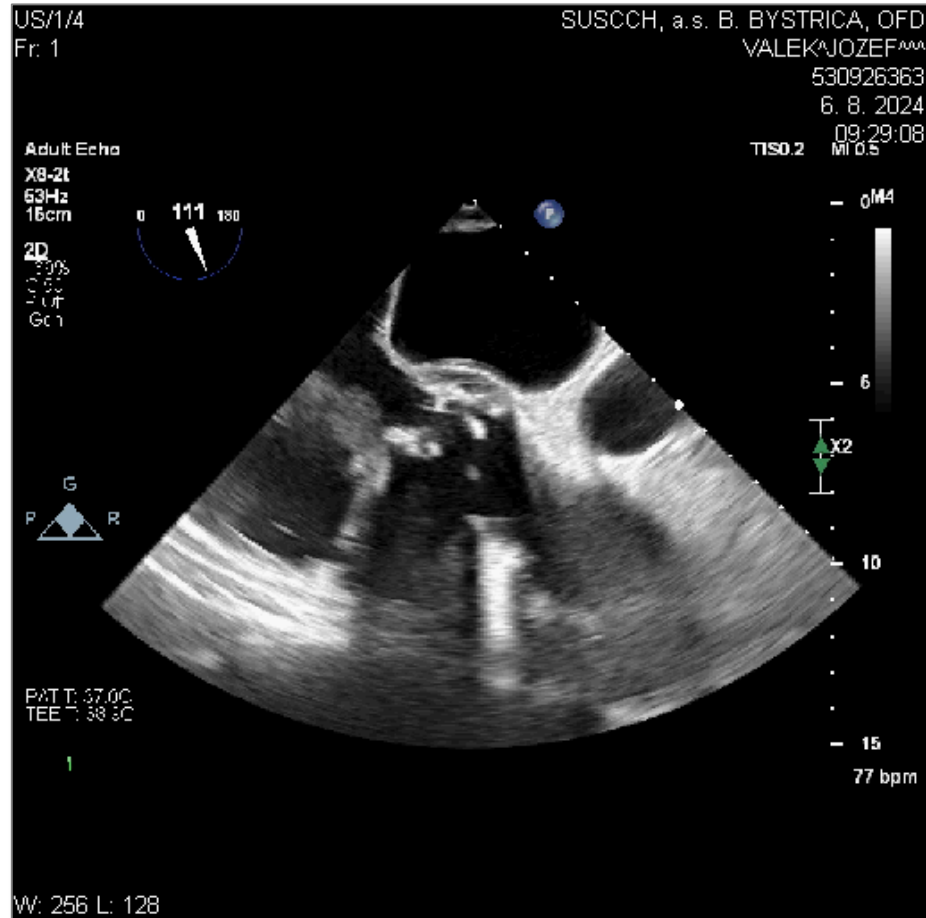


Kazuistika č.1





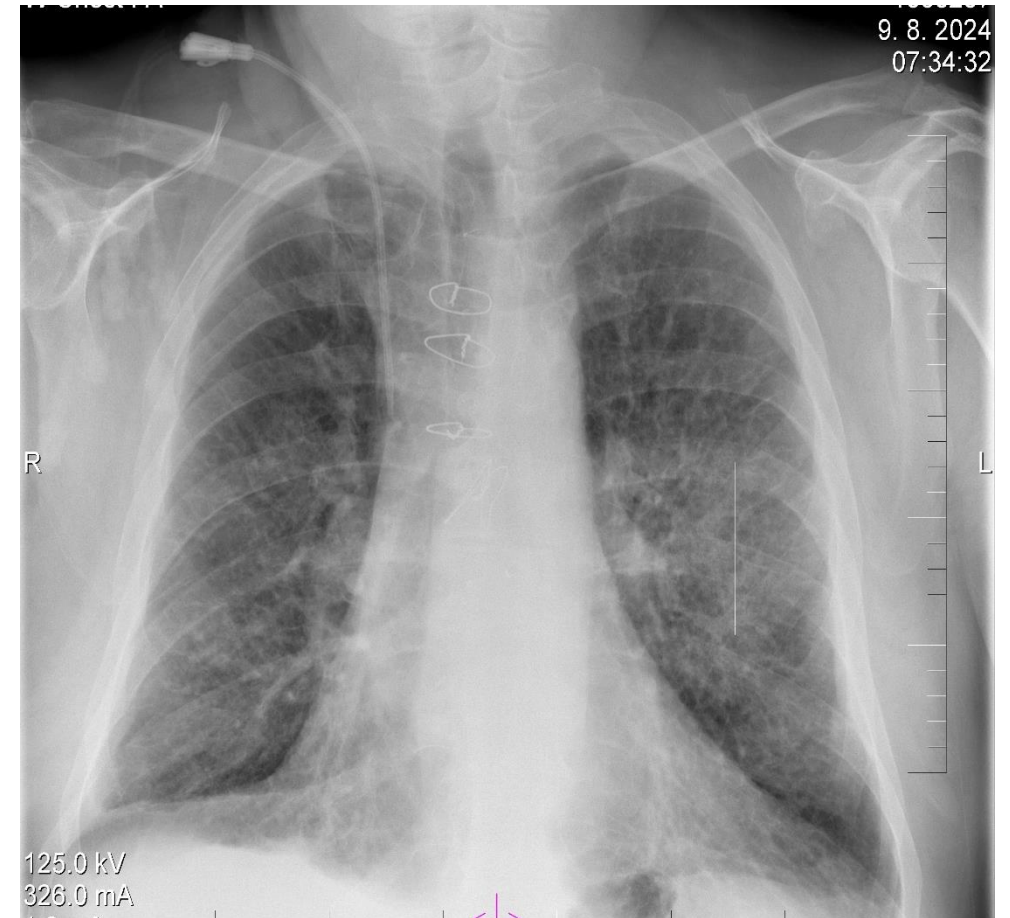
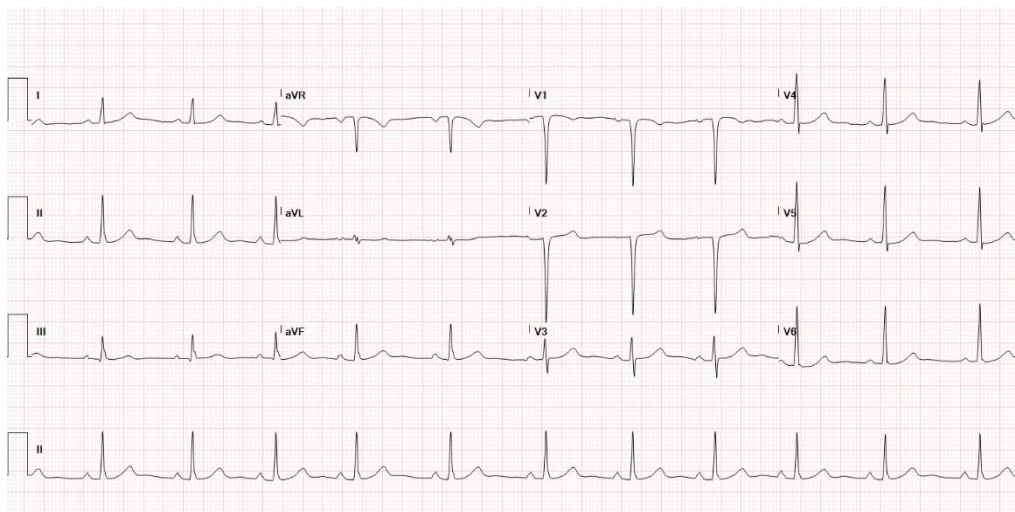
Kazuistika č.1





Kazuistika č.1

- Výška 182cm, hmotnosť 137kg, BMI 41,4
- Lab: urea 2,9mmol/l, kreat. 96umol/l, Na 137mmol/l, K 4,23mmol/l, Cl 101mmol/l, **CRP 134mg/l**, HgB 115g/l, Le $10,9 \times 10^9$
- Ekg:





Kazuistika č.1

Section 5. Recommendation Table 6 — Recommendations for the role of computed tomography, nuclear imaging, and magnetic resonance in infective endocarditis

Cardiac CTA is recommended in patients with possible NVE to detect valvular lesions and confirm the diagnosis.	I	B
Cardiac CTA is recommended in NVE and PVE to diagnose paravalvular or periprosthetic complications if echocardiography is inconclusive.	I	B
Brain and whole-body imaging (CT, [18F]FDG-PET/CT, and/or MRI) are recommended in symptomatic patients with NVE and PVE to detect peripheral lesions or add minor diagnostic criteria.	I	B
CIED-related IE to confirm the diagnosis of IE.		
Cardiac CTA is recommended in NVE and PVE to diagnose paravalvular or periprosthetic complications if echocardiography is inconclusive.	I	B
Brain and whole-body imaging (CT, [18F]FDG-PET/CT, and/or MRI) are recommended in symptomatic patients with NVE and PVE to detect peripheral lesions or add minor diagnostic criteria.	I	B

Section 9. Recommendation Table 15 — Recommendations for patients with musculoskeletal manifestations of infective endocarditis

MRI or PET/CT is recommended in patients with suspected spondylodiscitis and vertebral osteomyelitis complicating IE.	I	C
MRI or PET/CT is recommended in patients with suspected spondylodiscitis and vertebral osteomyelitis complicating IE.	I	C
with spondylodiscitis and/or septic arthritis with positive blood cultures for typical IE microorganisms.	I	C
More than 6-week antibiotic therapy should be considered in patients with osteoarticular IE-related lesions caused by difficult-to-treat microorganisms, such as <i>S. aureus</i> or <i>Candida</i> spp., and/or complicated with severe vertebral destruction or abscesses.	IIa	C



Kazuistika č.1

- CT kardio: drobné fokálne kalcifikáty LCA a prox. RIA s okrajovou nerovnosťou, bez závažnej stenotizácie koron. artérii, zhrubnutie cípov náhrady aort. Chlopne, v úrovni PKS/LKS paraaortálne PSA, v ĽP hypodenzný materiál v.s. charakteru trombu
- MR LS chrbtice: L3/L4 známky erozívnej spondylodiscitídy s drobnými intravertebrálnymi abscesmi L4 a s paravertebrálnymi abscesmi
- USG abdomenu: hepato-splenomegalia, známky cirhózy pečene, cholecystolitiáza
- CT hrudníka: intersticiálny pľúcny proces, ľahká reštrikčná ventilačná porucha, mierne redukovaná DLCO

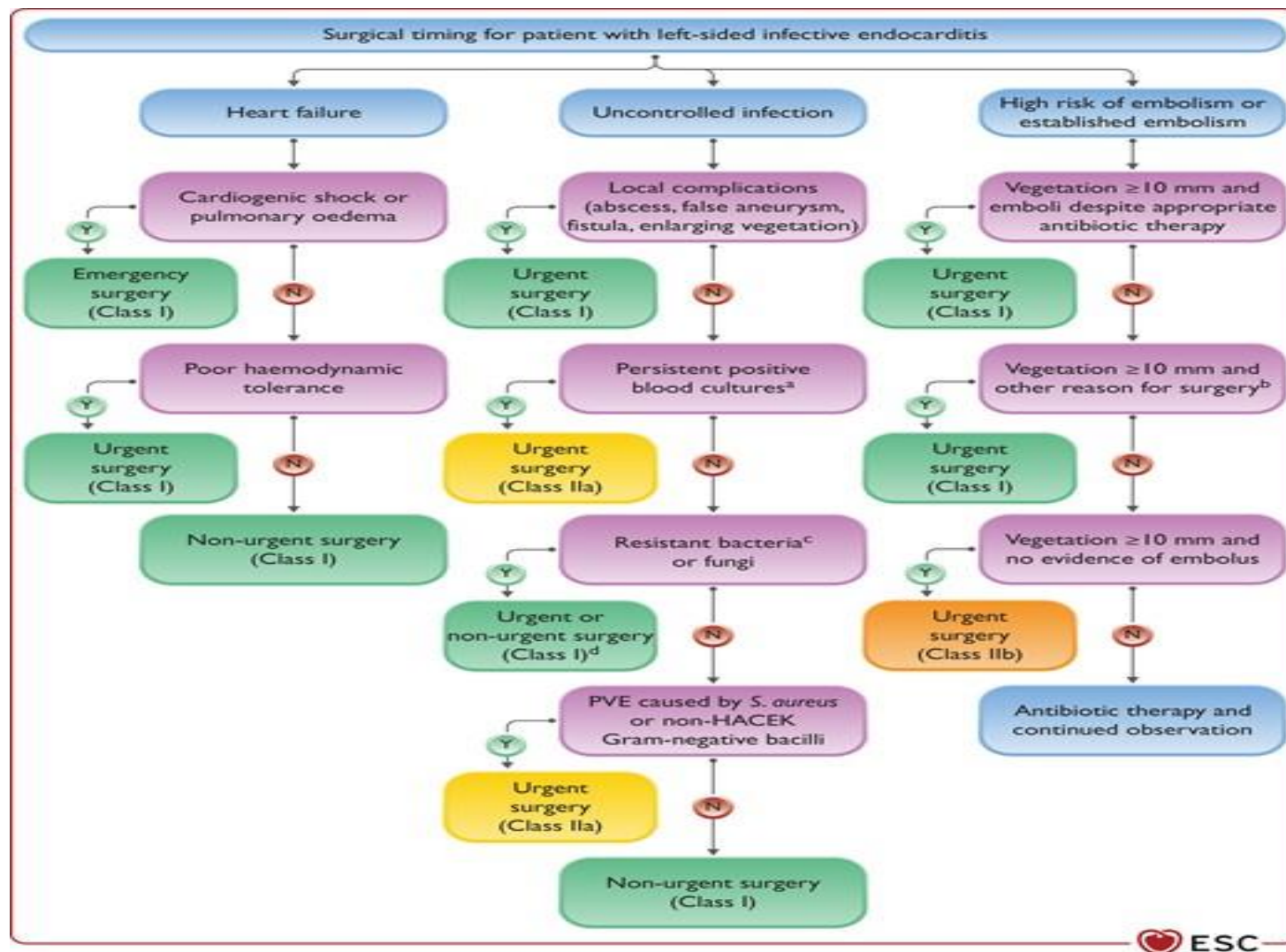
Kazuistika č.1

Recommendations		Class ^a	Level ^b
Beta-lactam and gentamicin-susceptible strains			
In patients with NVE due to non-HLAR <i>Enterococcus</i> spp., the combination of ampicillin or amoxicillin with ceftriaxone for 6 weeks or with gentamicin for 2 weeks is recommended using the following doses: ^{355,360,361}		I	B
<i>Adult antibiotic dosage and route</i>			
Amoxicillin	200 mg/kg/day i.v. in 4–6 doses		
Ampicillin	12 g/day i.v. in 4–6 doses		
Ceftriaxone	4 g/day i.v. in 2 doses		
Gentamicin ^c	3 mg/kg/day i.v. or i.m. in 1 dose		
<i>Paediatric antibiotic dosage and route</i>			
Ampicillin	300 mg/kg/day i.v. in 4–6 equally divided doses		
Ceftriaxone	100 mg/kg i.v. in 2 doses		
Gentamicin ^c	3 mg/kg/day i.v. or i.m. in 3 equally divided doses		
In patients with PVE and patients with complicated NVE or >3 months of symptoms due to non-HLAR <i>Enterococcus</i> spp., the combination of ampicillin or amoxicillin with ceftriaxone for 6 weeks or with gentamicin for 2 weeks is recommended using the following doses: ^{355,360,361}		I	B
<i>Adult antibiotic dosage and route</i>			
Amoxicillin	200 mg/kg/day i.v. in 4–6 doses		
Ampicillin	12 g/day i.v. in 4–6 doses		
Ceftriaxone	4 g/day i.v. in 2 doses		
Gentamicin ^c	3 mg/kg/day i.v. or i.m. in 1 dose		
<i>Paediatric antibiotic dosage and route</i>			
Ampicillin	300 mg/kg/day i.v. in 4–6 equally divided doses		
Amoxicillin	100–200 mg/kg/day i.v. in 4–6 doses		
Gentamicin ^c	3 mg/kg/day i.v. or i.m. in 3 equally divided doses		

Beta-lactam resistant <i>Enterococcus</i> spp. (<i>E. faecium</i>) ^e			
In patients with IE due to beta-lactam resistant <i>Enterococcus</i> spp. (<i>E. faecium</i>), vancomycin for 6 weeks combined with gentamicin for 2 weeks is recommended using the following doses: ^{358,359,369}		I	C
<i>Adult antibiotic dosage and route</i>			
Vancomycin	30 mg/kg/day i.v. in 2 doses		
Gentamicin	3 mg/kg/day i.v. or i.m. in 1 dose		
<i>Paediatric antibiotic dosage and route</i>			
Vancomycin	30 mg/kg/day i.v. in 2–3 equally divided doses		
Gentamicin	3 mg/kg/day i.v. or i.m. in 1 dose		

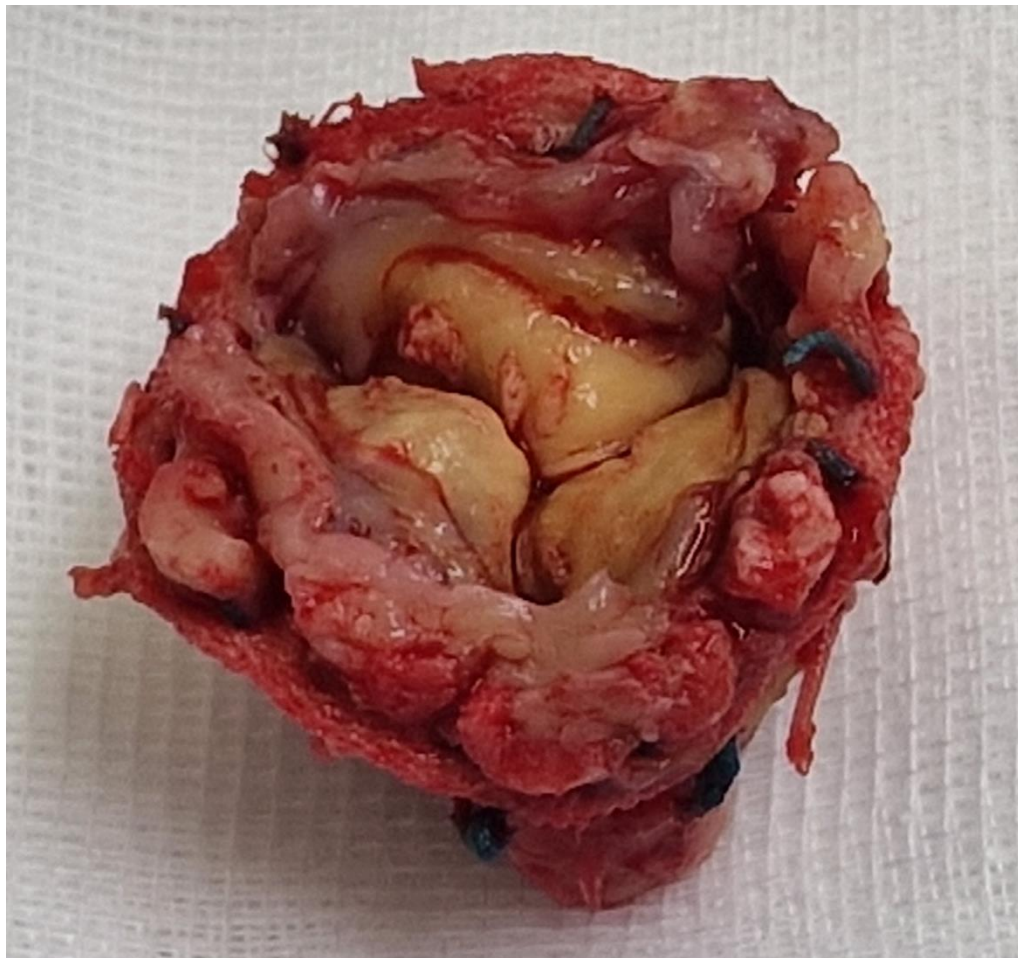
**ATB liečba: Vakomycin + Gentamicin ...
Vankomycin + Rifampicin ... pre zhoršenie
renálnych parametrov po infektolog. konzíliu
výmena za Linezolid + Levofloxacin (57 dní)**

Kazuistika č.1



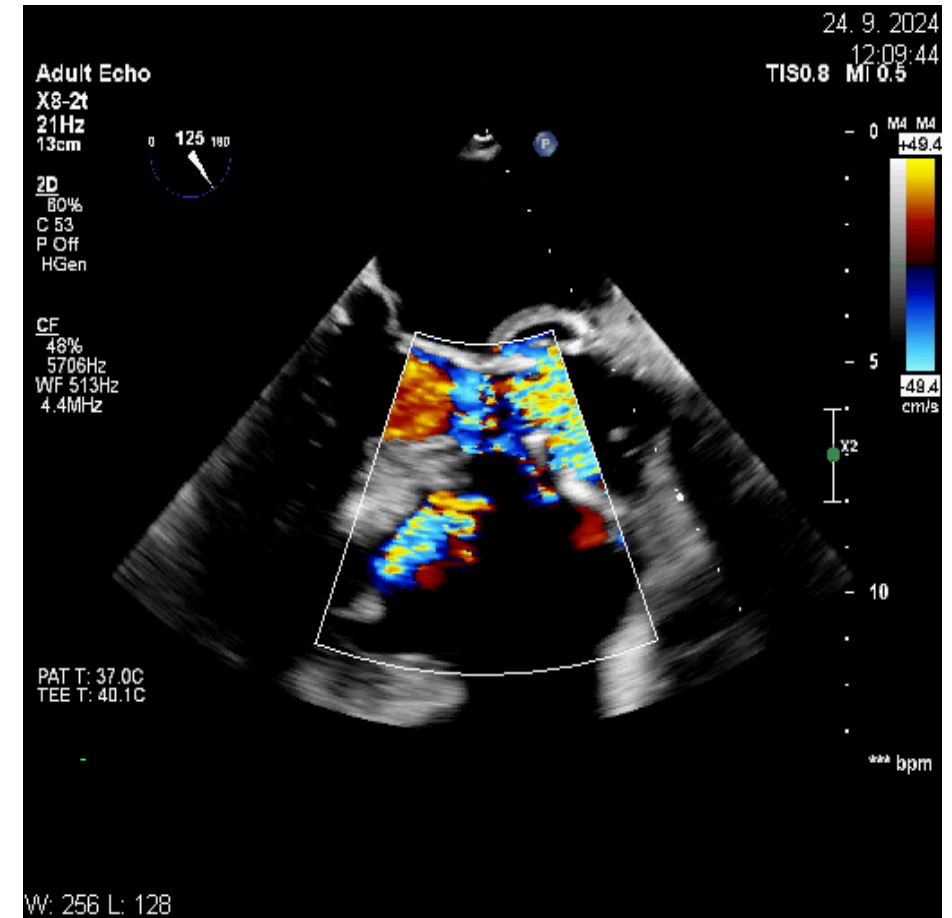
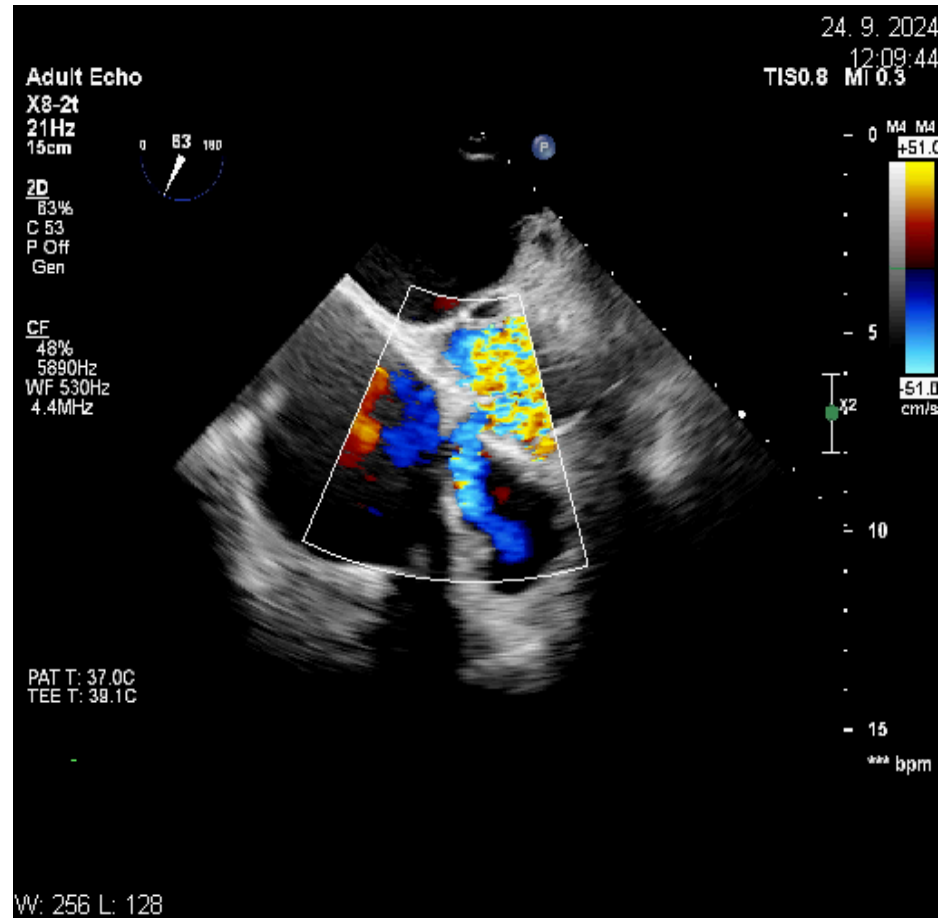


Kazuistika č.1





Kazuistika č.1





Kazuistika č.1

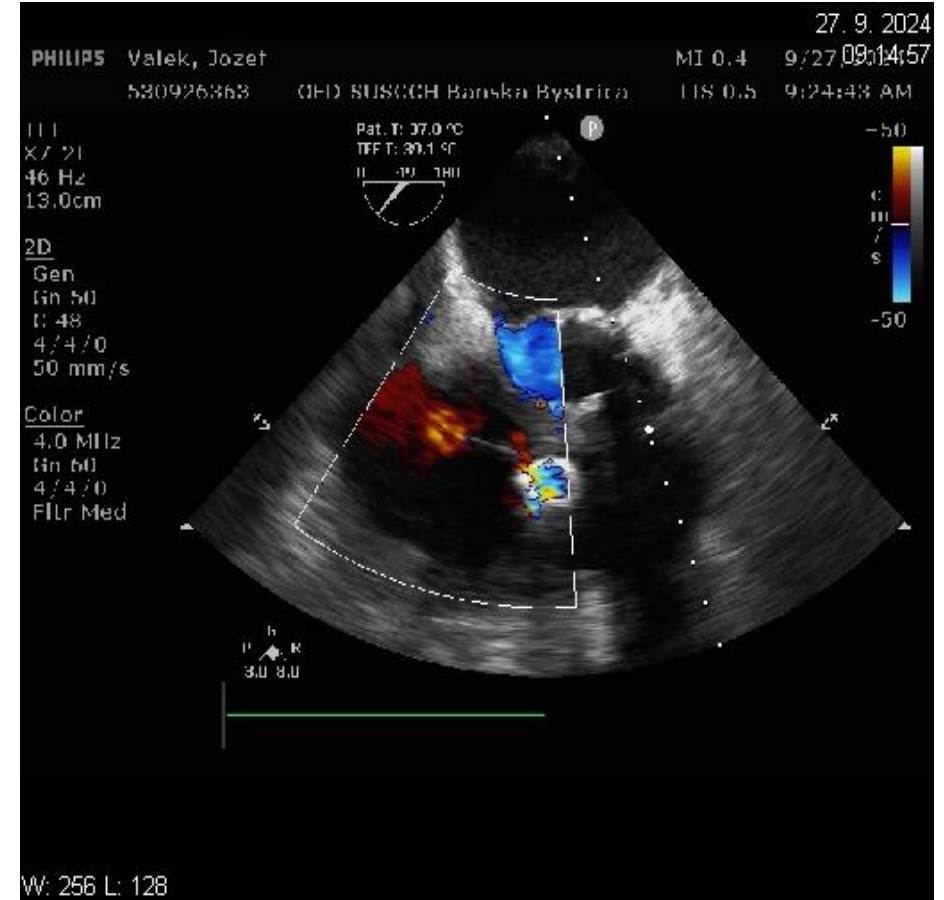
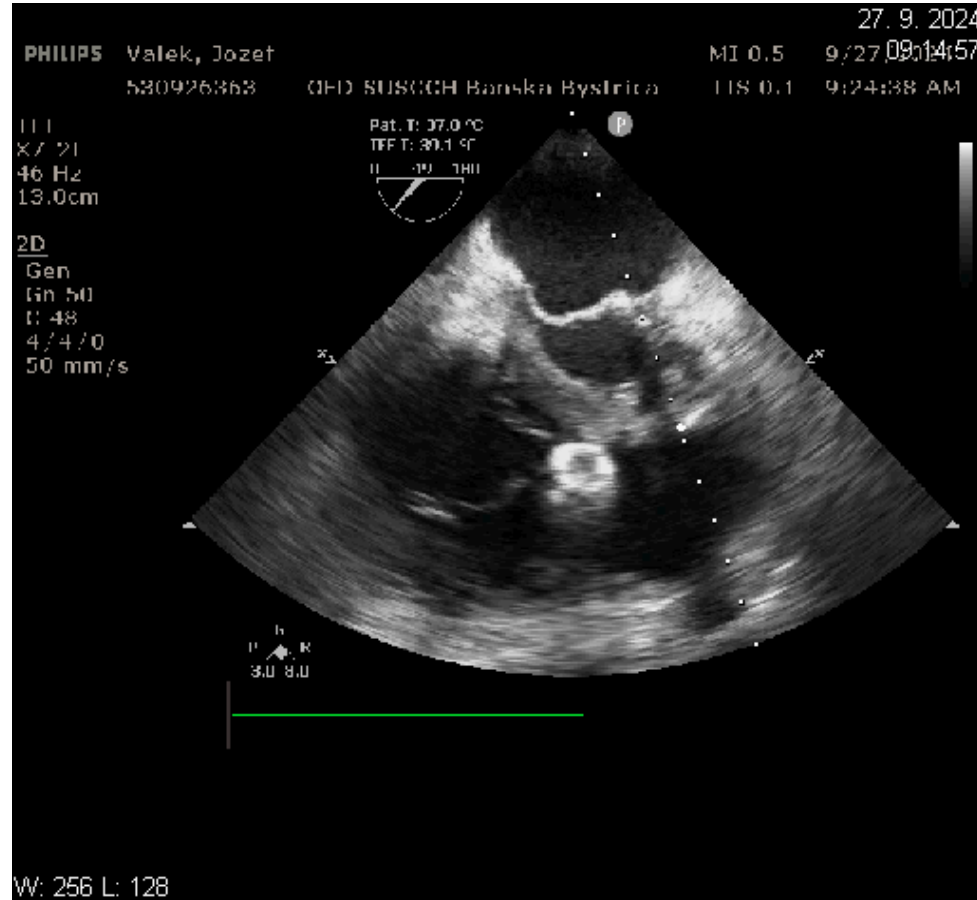
Ako ďalej?

- reoperácia / uzáver Amplatz okluderom
- EuroScore II 51,94%
- uzáver Amplatz okluderom non-inferiórny ku chirurgickému prístupu





Kazuistika č.1





Záver

2023 ESC Guidelines for the management of endocarditis ESC Clinical Practice Guidelines

15 Nov 2023

The current guidelines have been developed to support healthcare professionals with the diagnosis and management of patients with infective endocarditis, an infrequent but oftentimes fatal disease that can present with multiple different clinical scenarios. The last version of the ESC Infective Endocarditis Guidelines was published in 2015. Since then there have been multiple developments in the care of patients with infective endocarditis including refinements of the indications for antibiotic prophylaxis, improvements in diagnostic capabilities, establishment of endocarditis teams and heart valve centres, identification of patients eligible for outpatient antibiotic therapy, diagnosis and risk-stratification of patients suffering complications of endocarditis (in particular stroke), management of patients with transcatheter heart valve- and cardiac implantable electronic device-associated infective endocarditis, and patient-centred care during the acute and follow-up phases of this challenging disease. In addition, the 2023 version of the Guidelines includes a new diagnostic algorithm, which will be particularly helpful in correctly classifying patients. The current document should serve as a guide for clinicians involved in the diagnosis and management of infective endocarditis patients and should lead to improved outcomes for this serious disease.

Guidelines and related materials are for use by individuals for personal or educational purposes. No commercial use is allowed. Re-use permission must be correctly obtained from the publisher.

ESC Guidelines are protected by copyright. As per opt out option under Article 4 §3 of EU Directive 2019/790, the ESC reserves all rights to license uses of ESC Guidelines to train or develop generative artificial intelligence (AI) models, large language models or other deep learning or machine learning models. Any use of ESC Guidelines in software tools, generative AI models, computational models, or algorithms in which ESC Guideline content is included, cited, or transformed in any way requires a formal license agreement.

Topic(s): *Treatment; Infective Endocarditis; Myocardial Disease; Congenital Heart Disease and Pediatric Cardiology; Pathophysiology and Mechanisms; Prevention; Epidemiology, Prognosis, Outcome; Valvular Heart Disease; Pericardial Disease; Clinical; Diagnostic Methods; Pulmonary Circulation, Pulmonary Embolism, Right Heart Failure; Cardiac Implantable Device-related Endocarditis;*



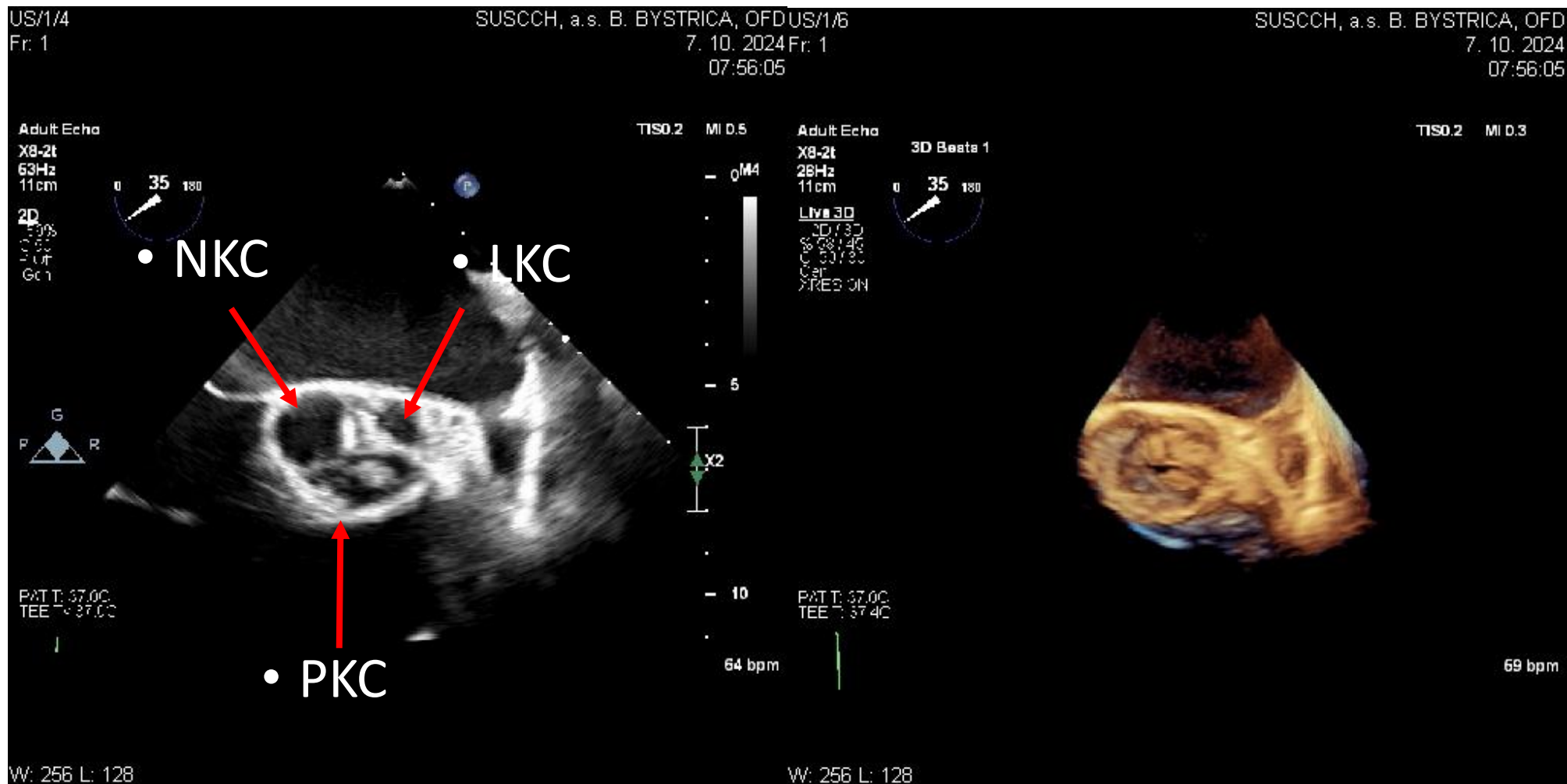
Kazuistika č.2

- 21- ročná pacientka s vrodenou aortálnou stenózou bikuspidálnej chlopne, po katetrizačnej valvuloplastike v novorodeneckom veku (08/2001), po chirurgickej valvuloplastike- trikuspidalizácia chlopne, shaving chlopne s vytvorením pravého cípu, extenziou cípov z goretexu v 08/2015
- 25.1.2023 počas fyzickej námahy tlak na prednej strane hrudníka, presynkopa.



Aortálna chlopňa

ECHO anatómia

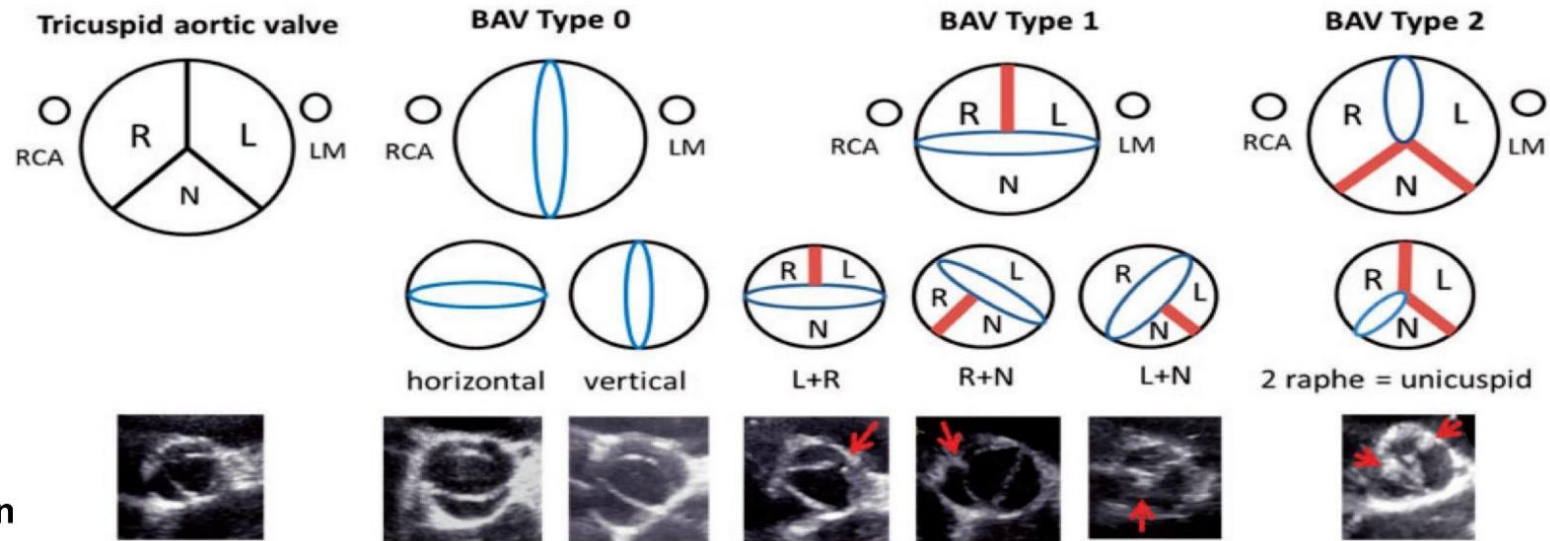




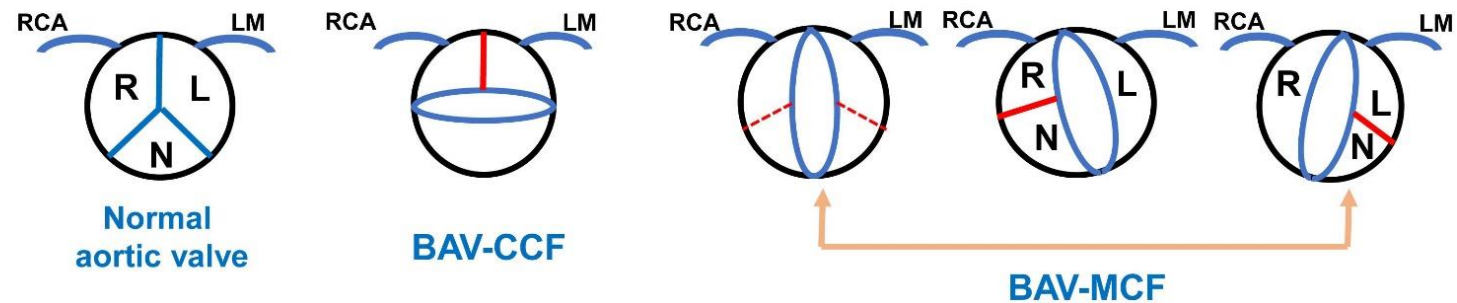
Aortálna chlopňa

ECHO anatómia

A



B



Dichotomous classification

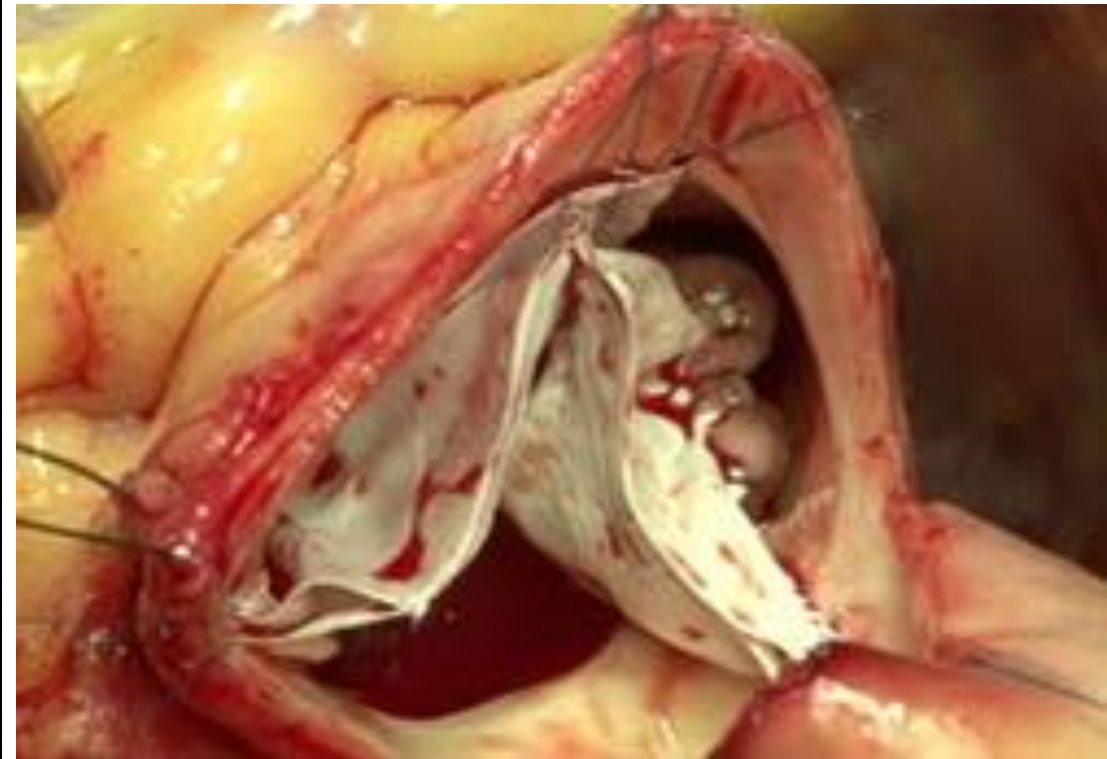
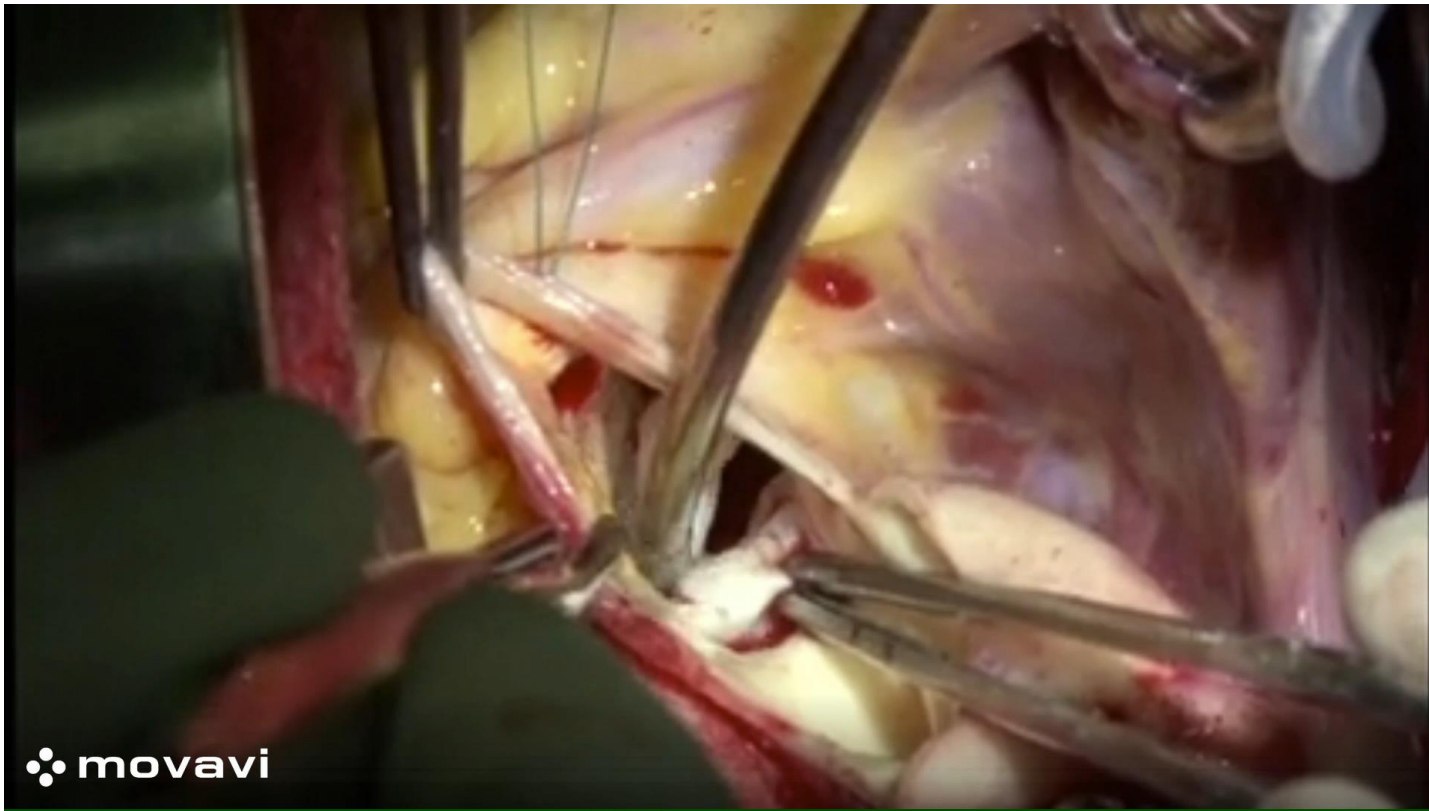


Aortálna chlopňa

ECHO anatómia



Valvuloplasty by Polytetrafluorethylene Leaflet Extensions for Bicuspid Aortic Valve

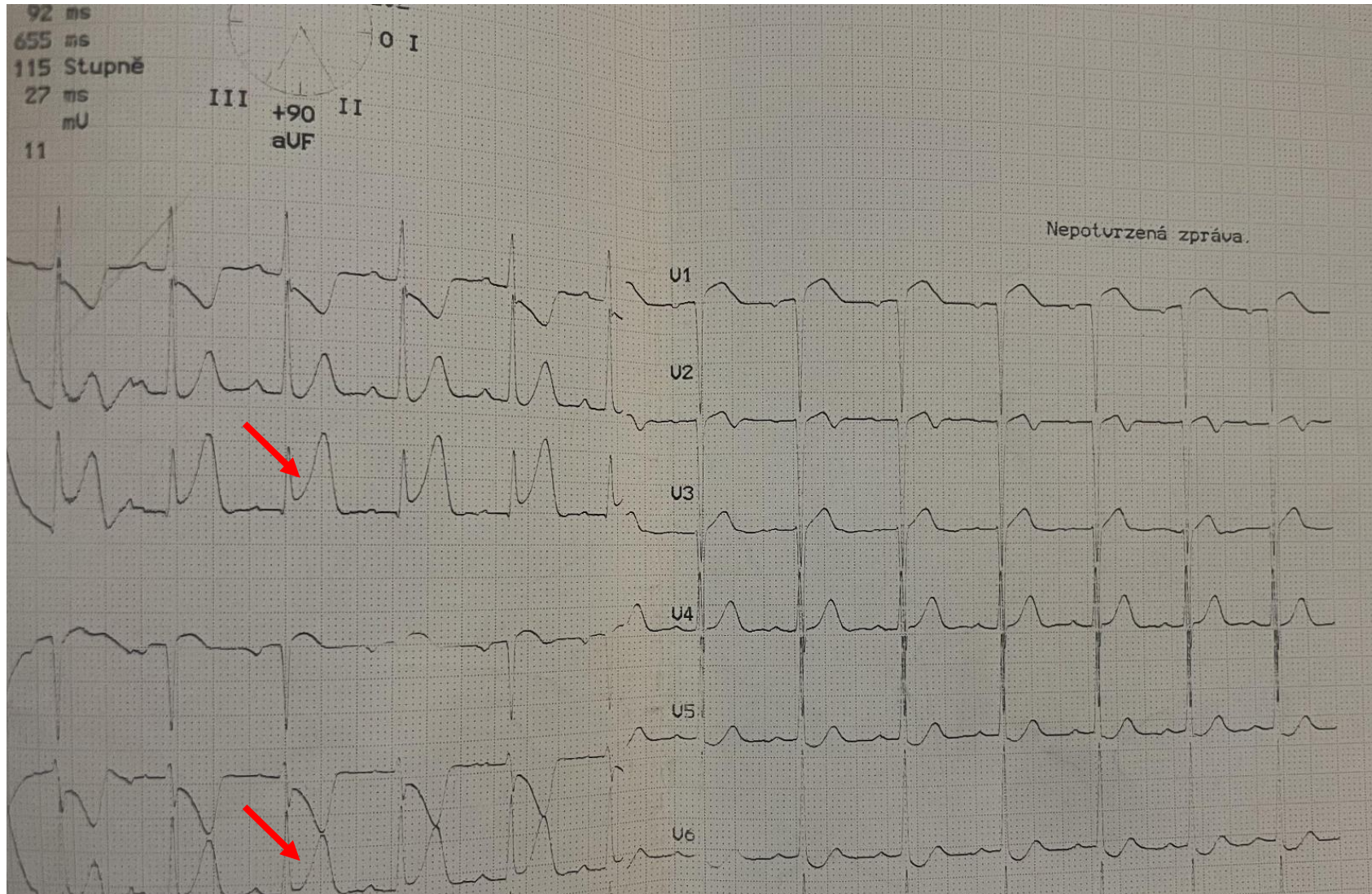


movavi



Kazuistika č.2

EKG





Kazuistika č.2

Laboratórne výsledky:

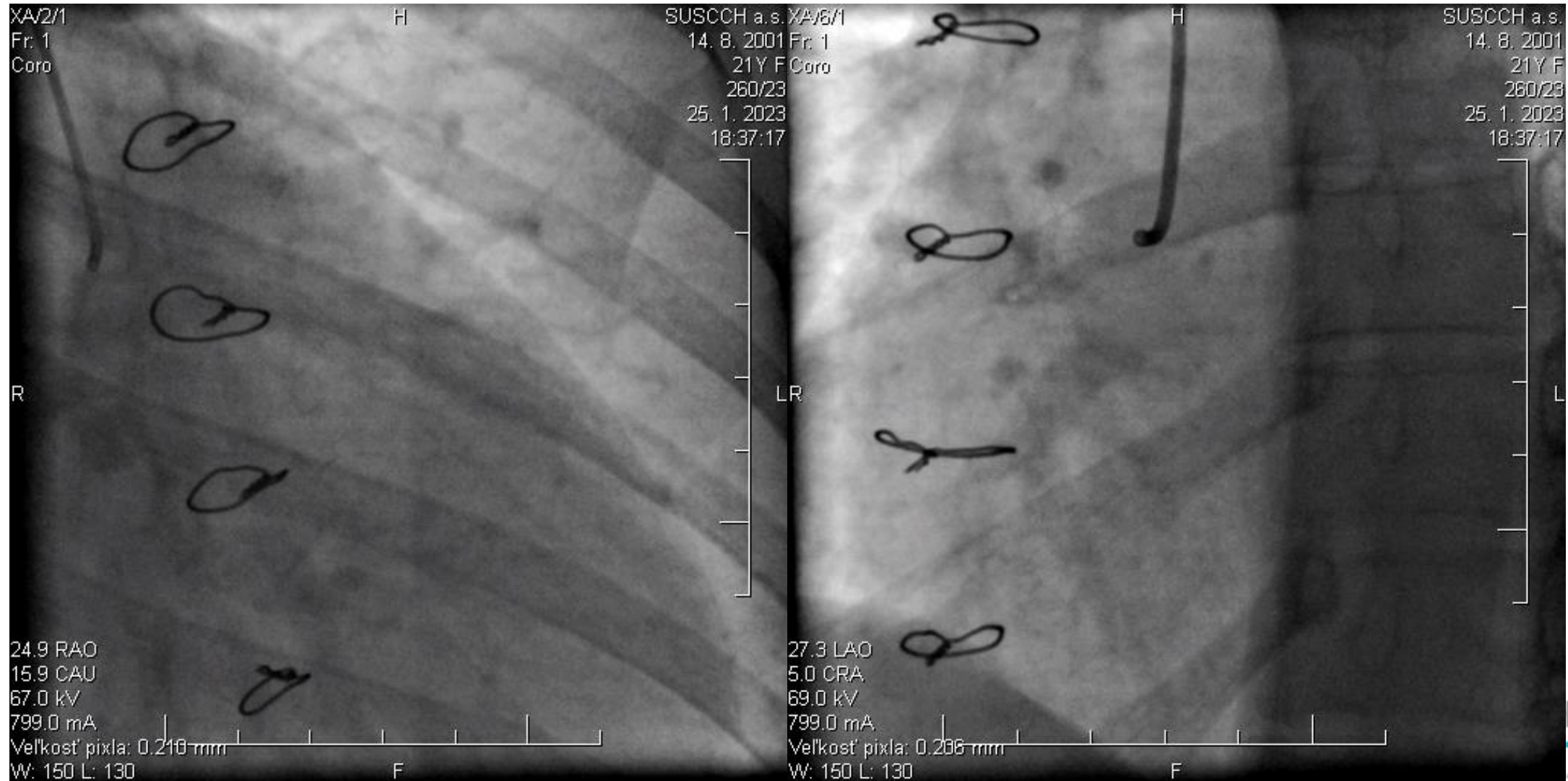
- Troponín Tnl hs (ng/l) **35 186**
- NT-proBNP (pg/ml) **2840.0**





Kazuistika č.2

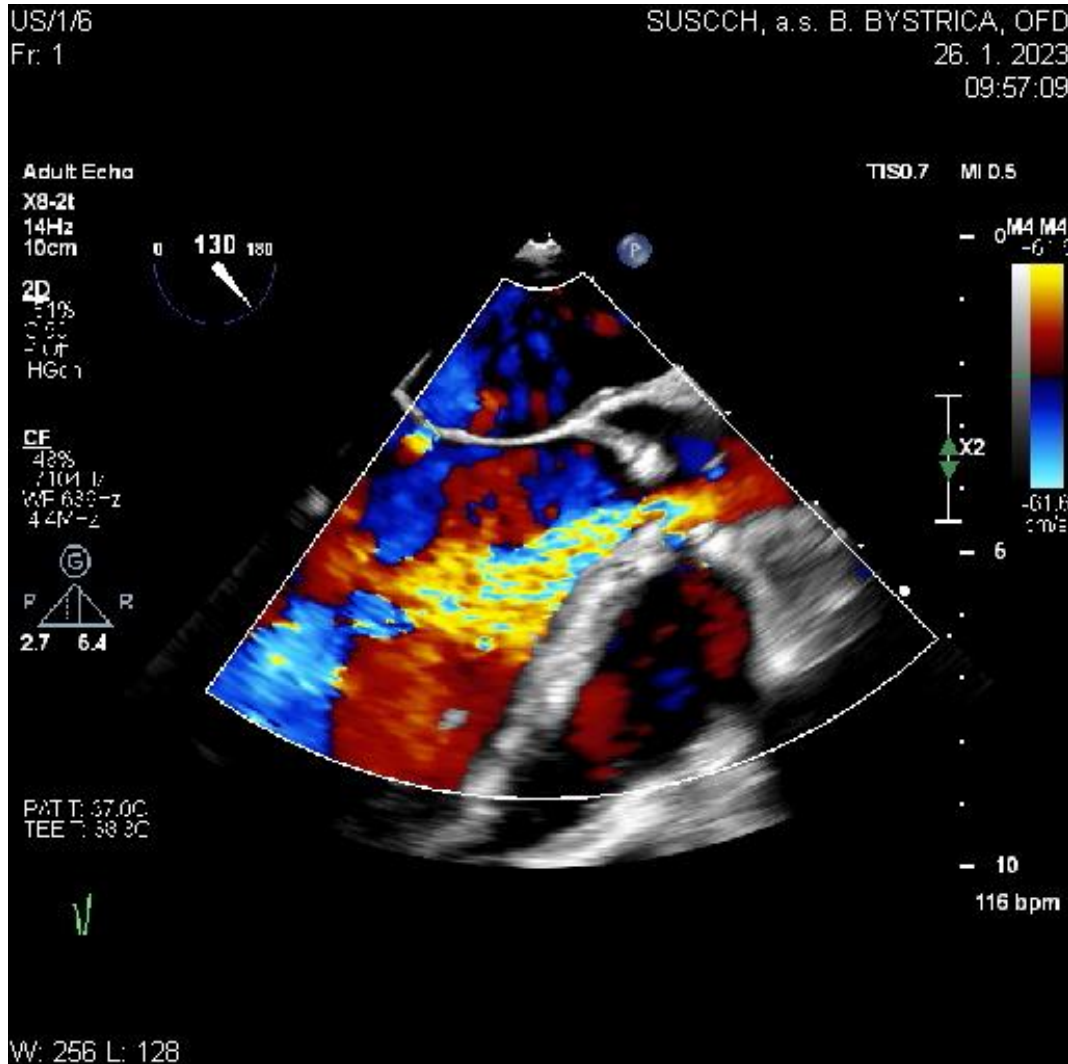
Selektívna koronarografia





Kazuistika č.2

Transezofageálne Echo





Kazuistika č.2

CT- angiografia hrudnej aorty a koronárnych tepien

neo RCC s atypickým
uložením - v zachytenej
systole s výraznou addukciou
k stene bulbu s parciálnym
prekrytím ostia RCA a jeho
dekonfiguráciou a obštrukciou



CT nález , oddelenie radiologie SUSCCH a.s. : MUDr. Daxner



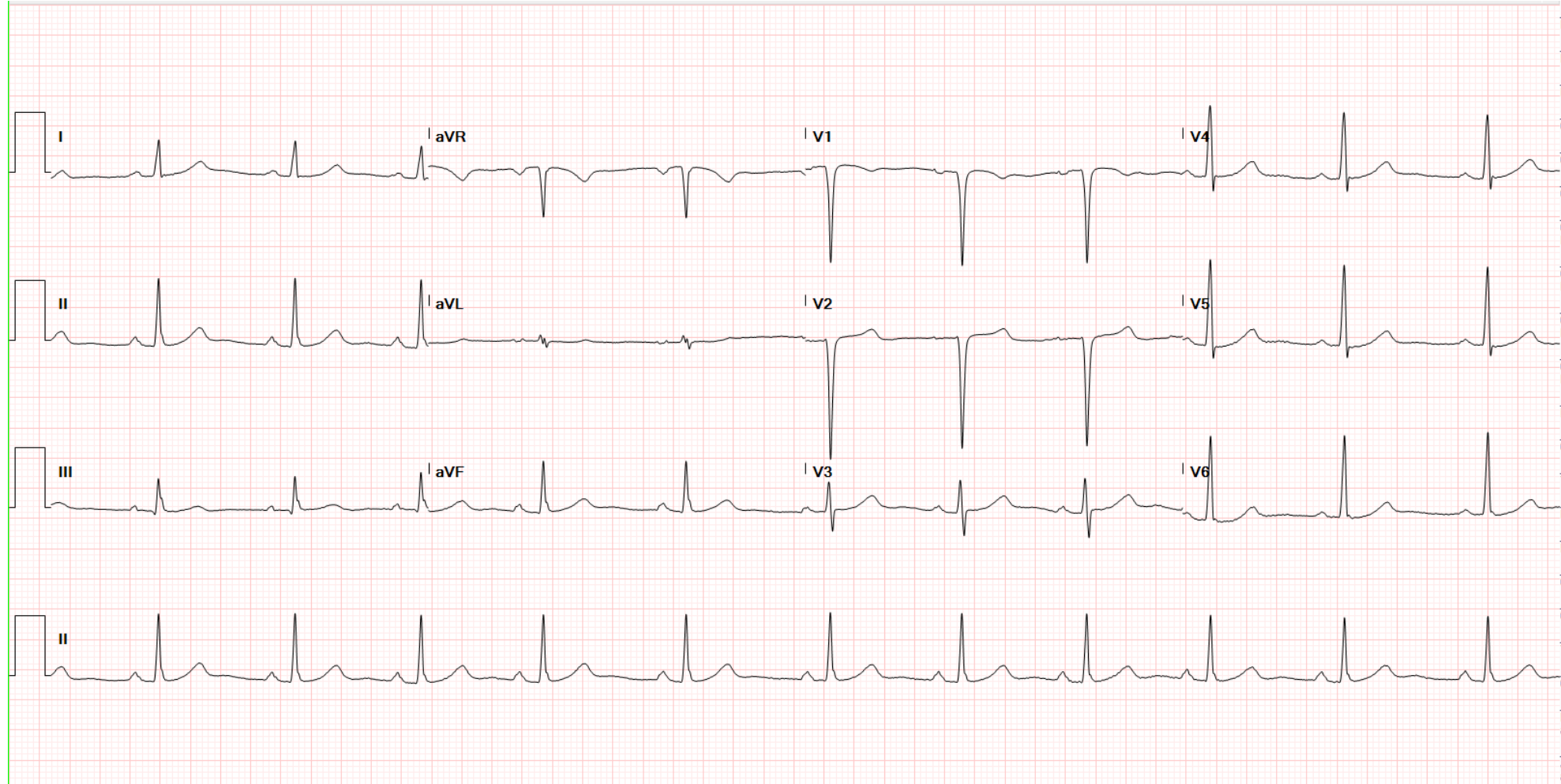
Kazuistika č.2

Manažment

- Excisio et substitutio neo-valvae aortae cum prothesis mechanica OnX Nr. 19mm; Plastica annuli v. aortae sec. Nicks cum pericardium bovinum, Shaving ostii a. coronariae dextri; Re-Do; ECC fem-fem; Re-Sternotomia 30.1.2024
- Warfarinizovaná
- **Echokardiografia** 3.2.2023:
 - v aortálnej pozícii mechanická náhrada
 - V max 2,6m/s, PG/MG 29/18torr
 - bez evidentného intra či paravalvulárneho leaku
 - ascendentná aorta 28mm



Kazuistika č.2





Ďakujem za pozornosť .