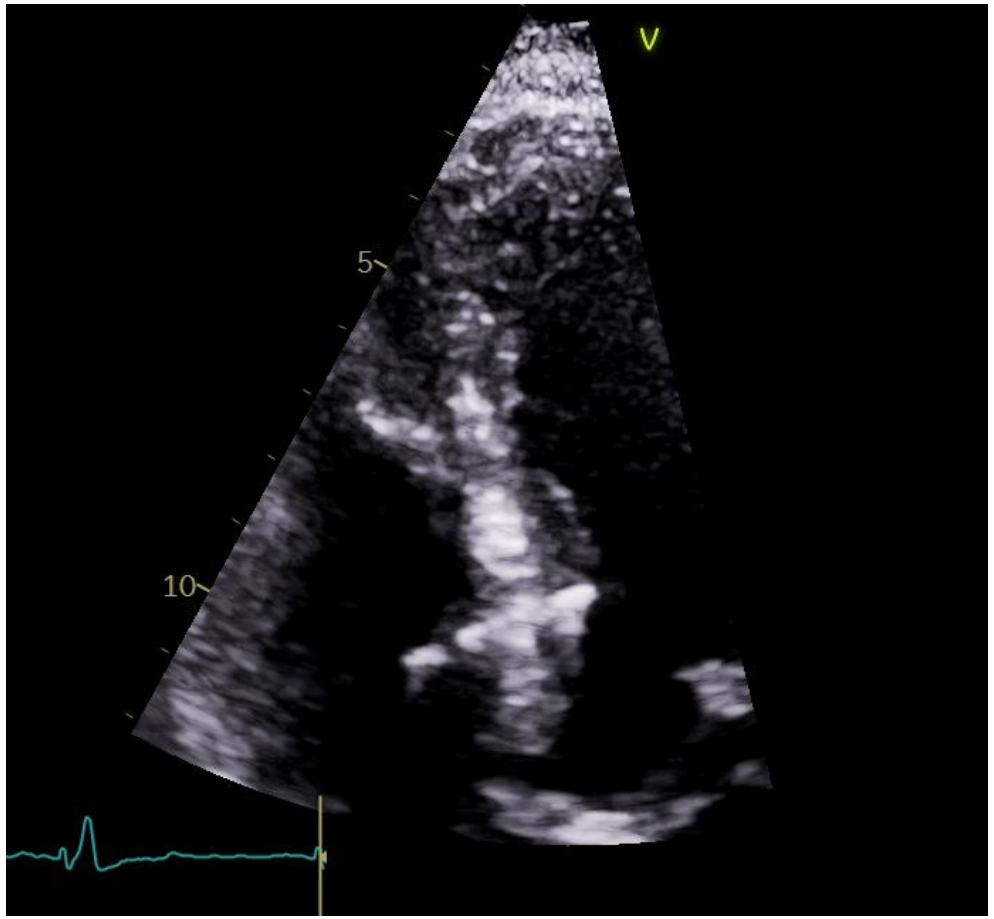
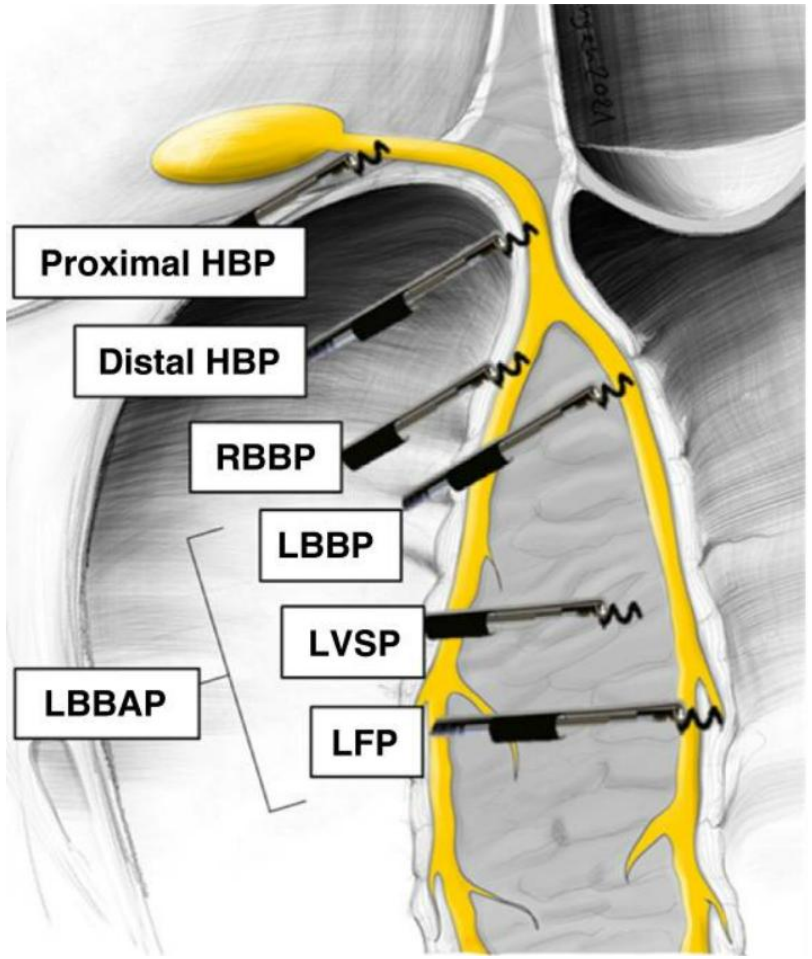
Resynchronizace pacientů s LBBB pomocí LBBAP vede k reverzní remodelaci LK a regresi komorové dyssynchronie a třídy NYHA



J. Mizner, T. Kníže, L. Povišer, M. Marish, L. Rademakers (Catharina Ziekenhuis, Eindhoven), K. Čurila

Úvod - Stimulace převodního systému a CRT

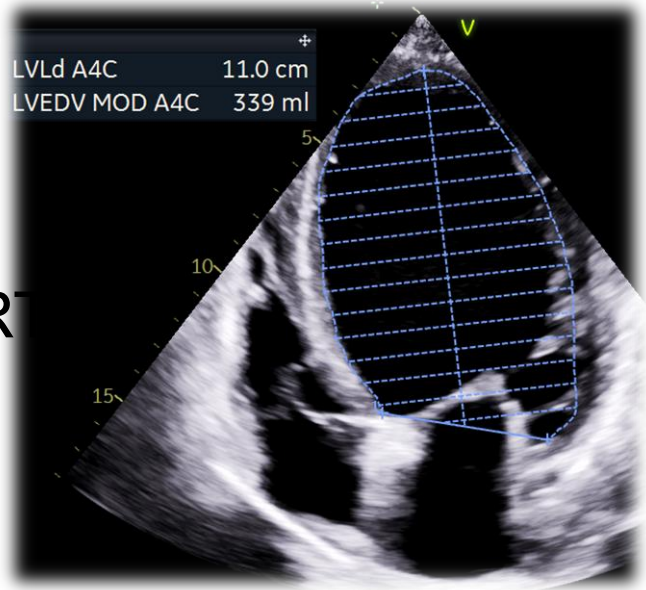


Burri et al. 2022, EP Europace

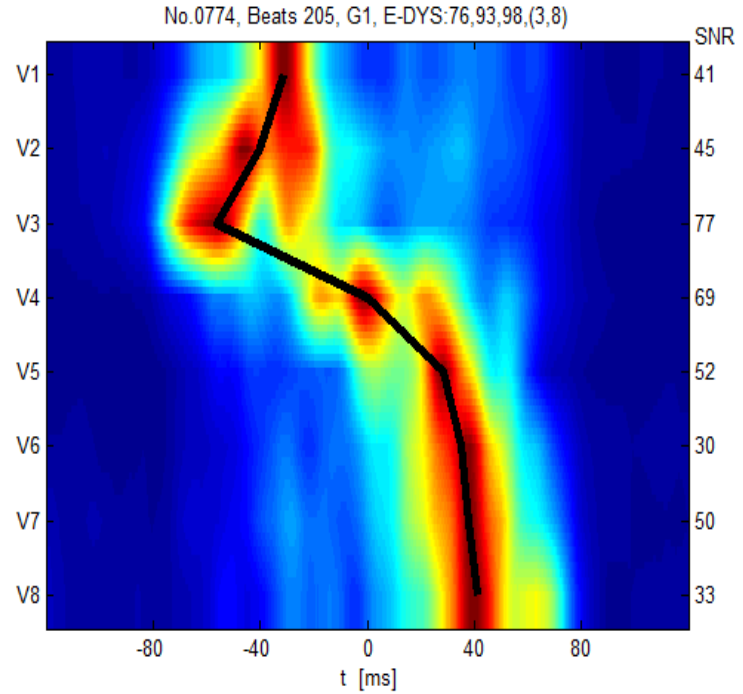
HBP = His bundle pacing
LBBP = Left bundle branch pacing
LVSP = Left ventricular septal pacing
LFP = Left fascicular pacing
LBBAP = Left bundle branch area pacing
RBBP = Right bundle branch pacing

Cíle:

1. Zhodnocení reverzní remodelace LK při CR
   pomocí LBBAP



1. Zhodnocení komorové dyssynchronie

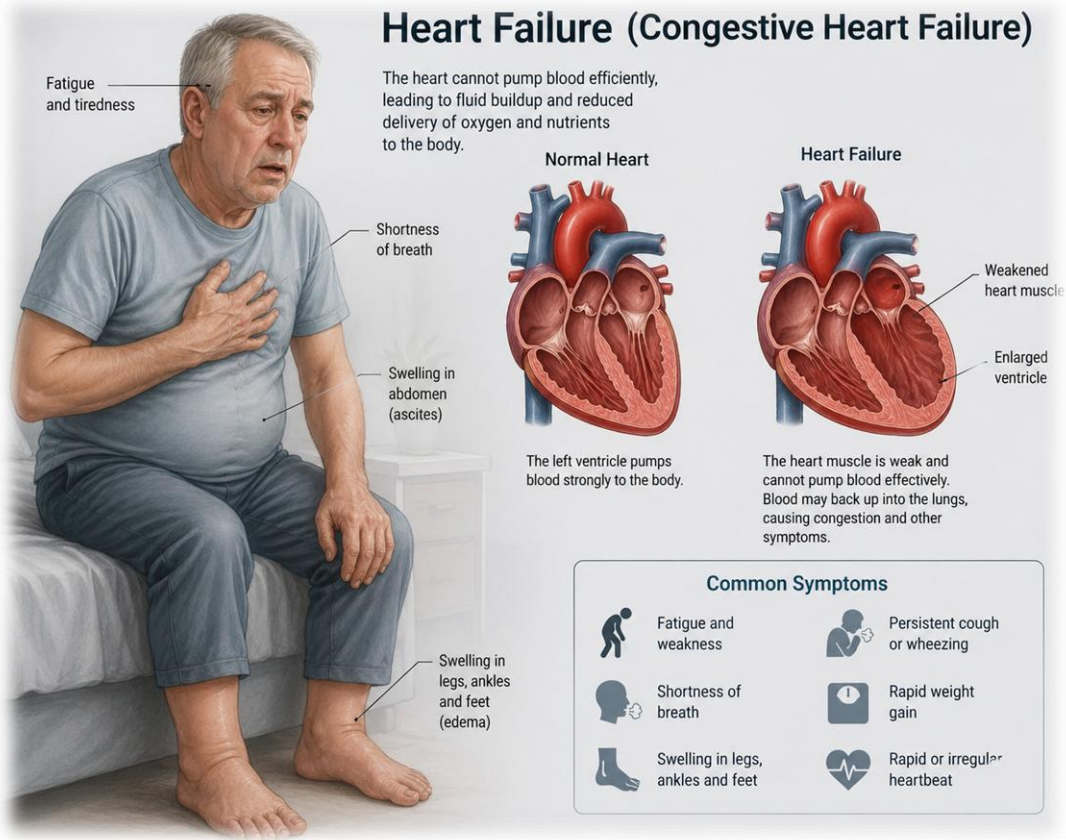


2. Zhodnocení symptomů (NYHA)

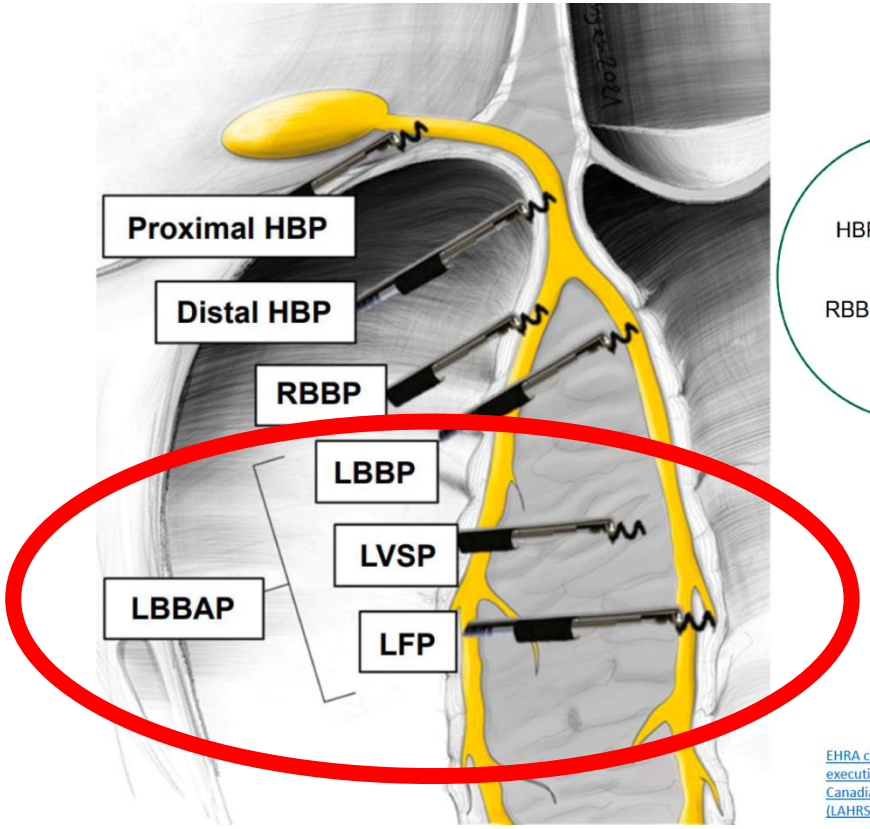
Metodika – implantační centra

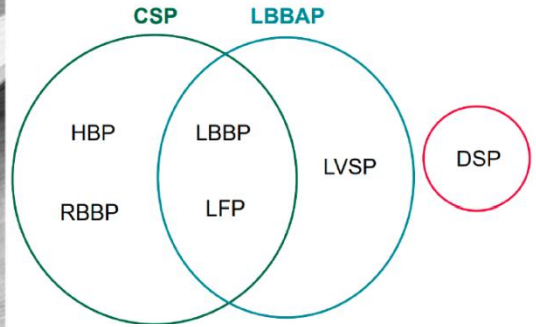
Vstupní kritéria

- Srdeční selhání
- LVEF < 40 %
- LBBB morfologie
- Úspěšná LBBAP

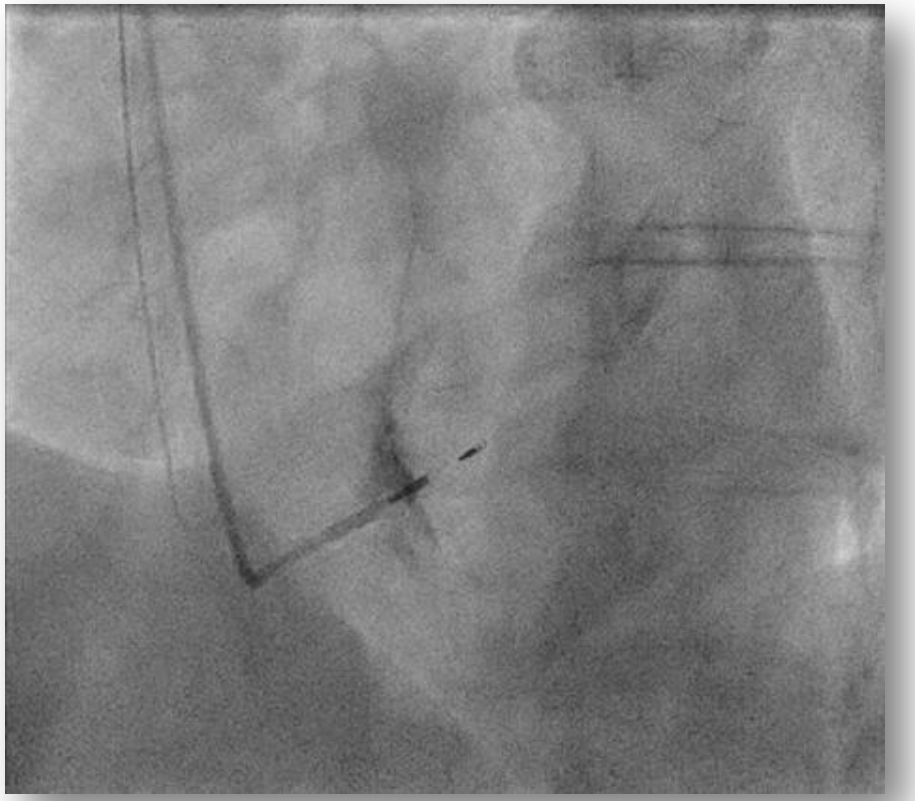


Metodika – implantační techniky

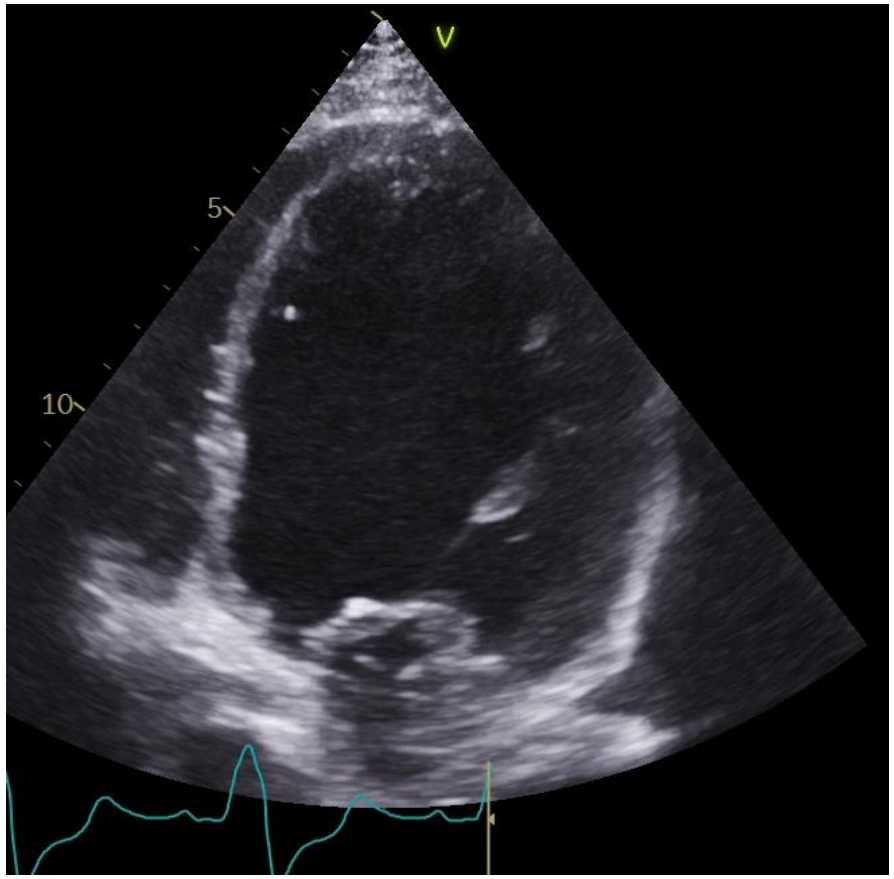




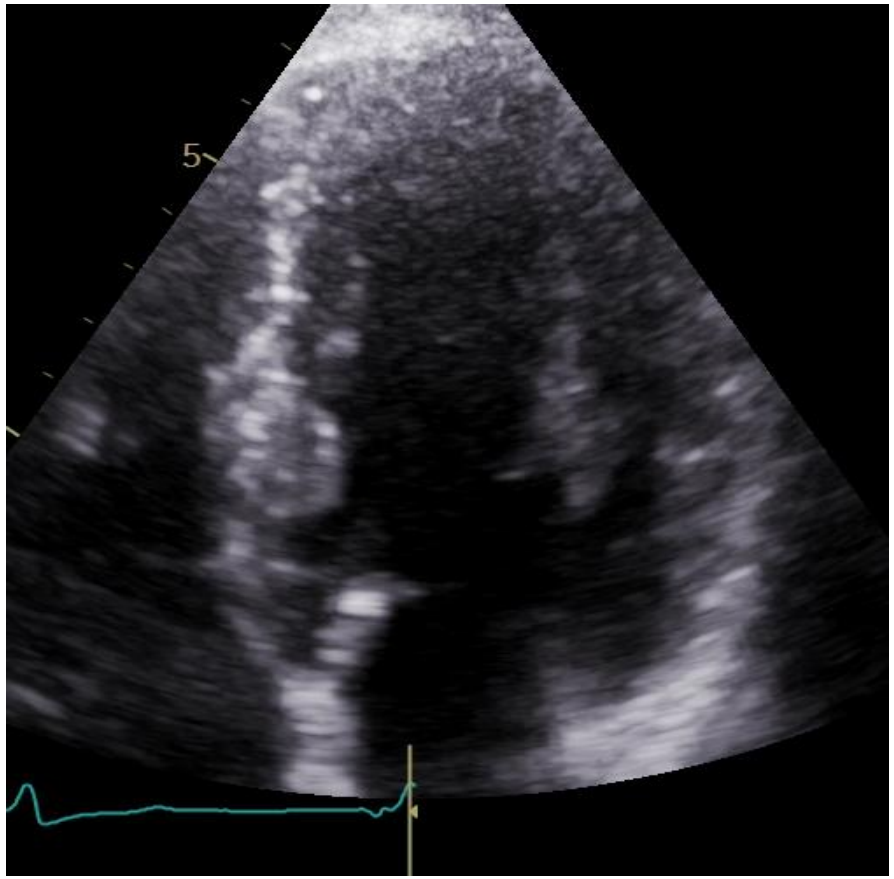
EHRA clinical consensus statement on conduction system pacing implantation: executive summary. Endorsed by the Asia-Pacific Heart Rhythm Society (APHRS), Canadian Heart Rhythm Society (CHRS) and Latin-American Heart Rhythm Society (LAHRS) | EP Europace | Oxford Academic (oup.com)



Metodika – hodnocení reverzní remodelace

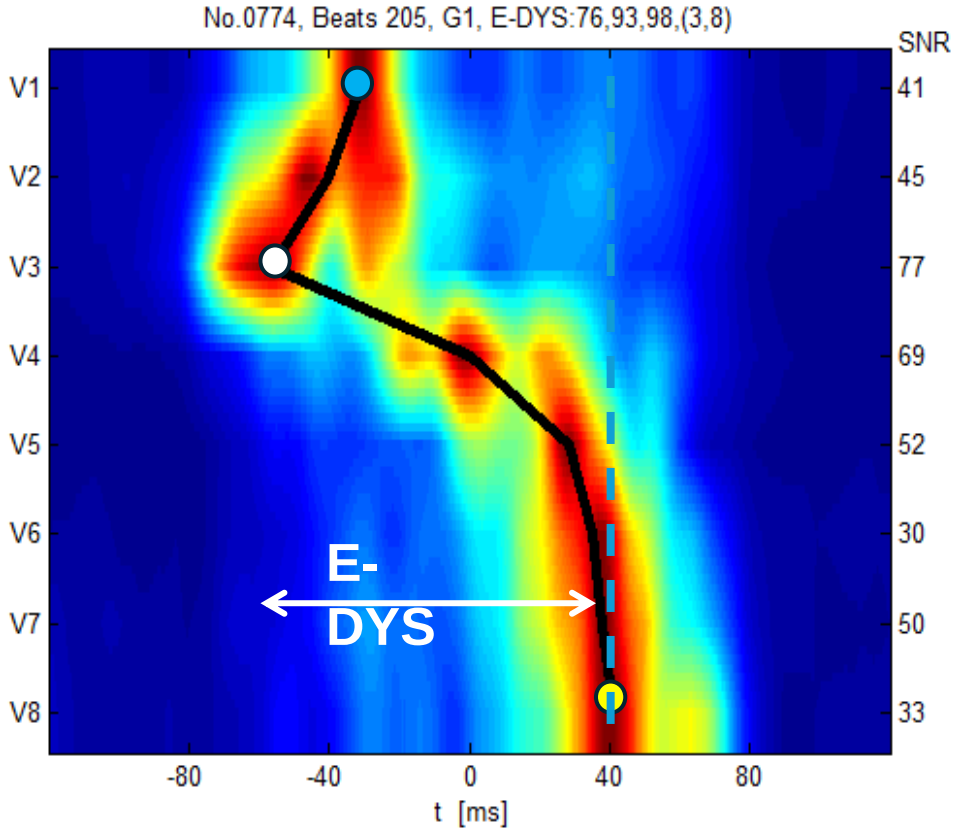


Pre-CRT



6Mo Post-CRT

Metodika - dyssynchronie – UHF-ECG a auto QRSd



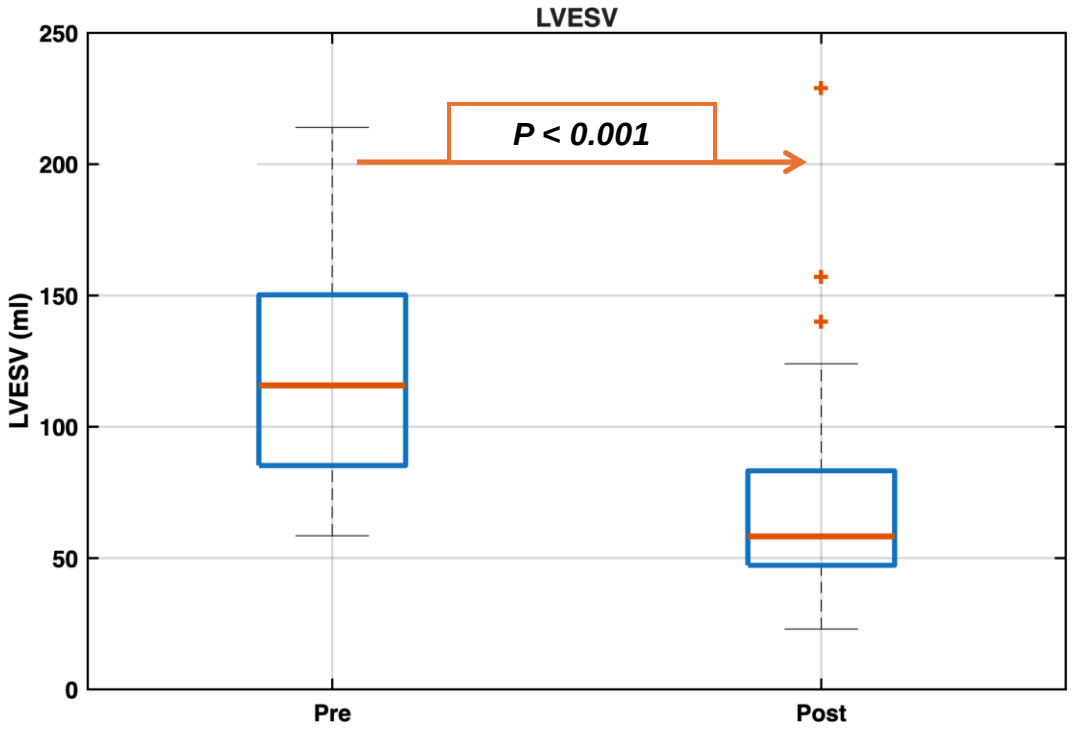
INSTITUTE OF SCIENTIFIC INSTRUMENTS
The Czech Academy of Sciences

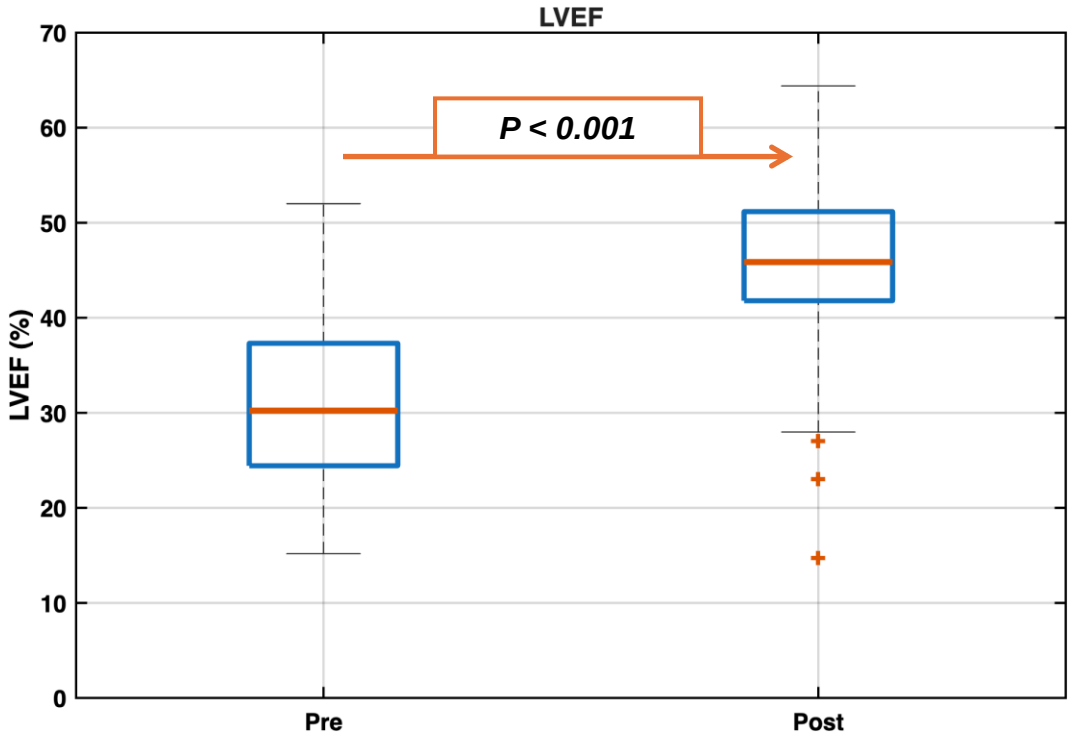
electrical e-Dys

Charakteristika souboru

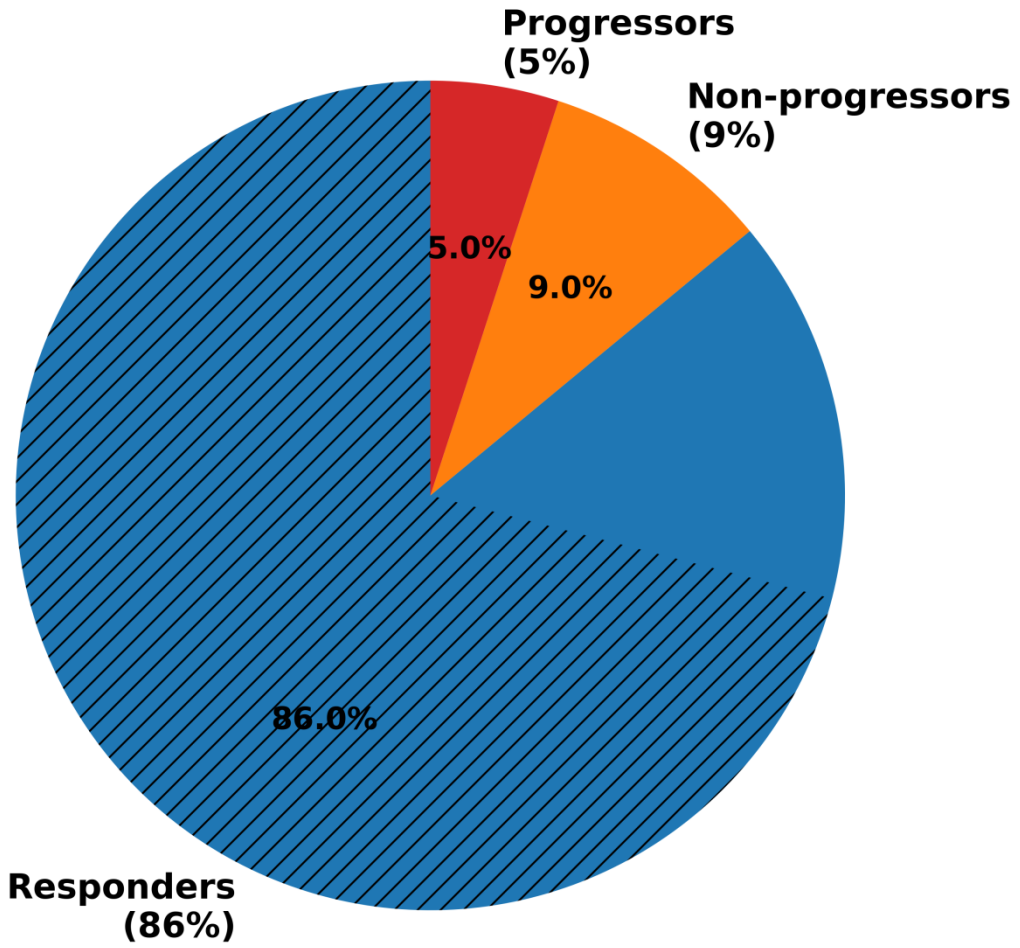
Characteristic	Number (%)
Number of Patients	100
Age	69 ± 11 years
Male	62 (62)
Female	38 (38)
Mean BMI	27 ± 6
Arterial Hypertension	71 (71)
Coronary Artery Disease	37 (37)
Diabetes Mellitus	35 (35)
Chronic Kidney Disease	9 (9)
Severe Valvular Disease	22 (22)
Atrial Fibrillation	36 (36)
Strauss LBBB	84 (84)
Mean Septal Thickness	11 ± 2 mm
Mean Baseline QRS Duration	172 ± 17 ms

Výsledky – reverzní remodelace

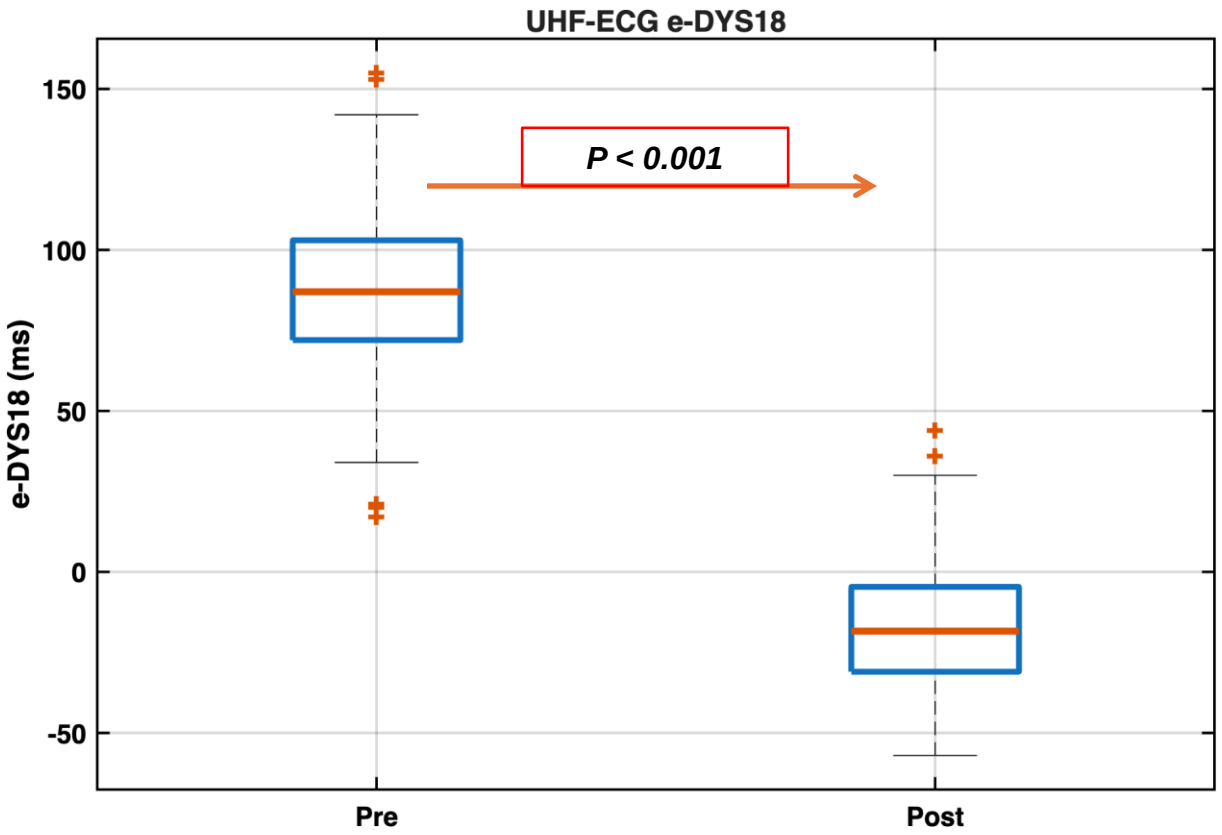


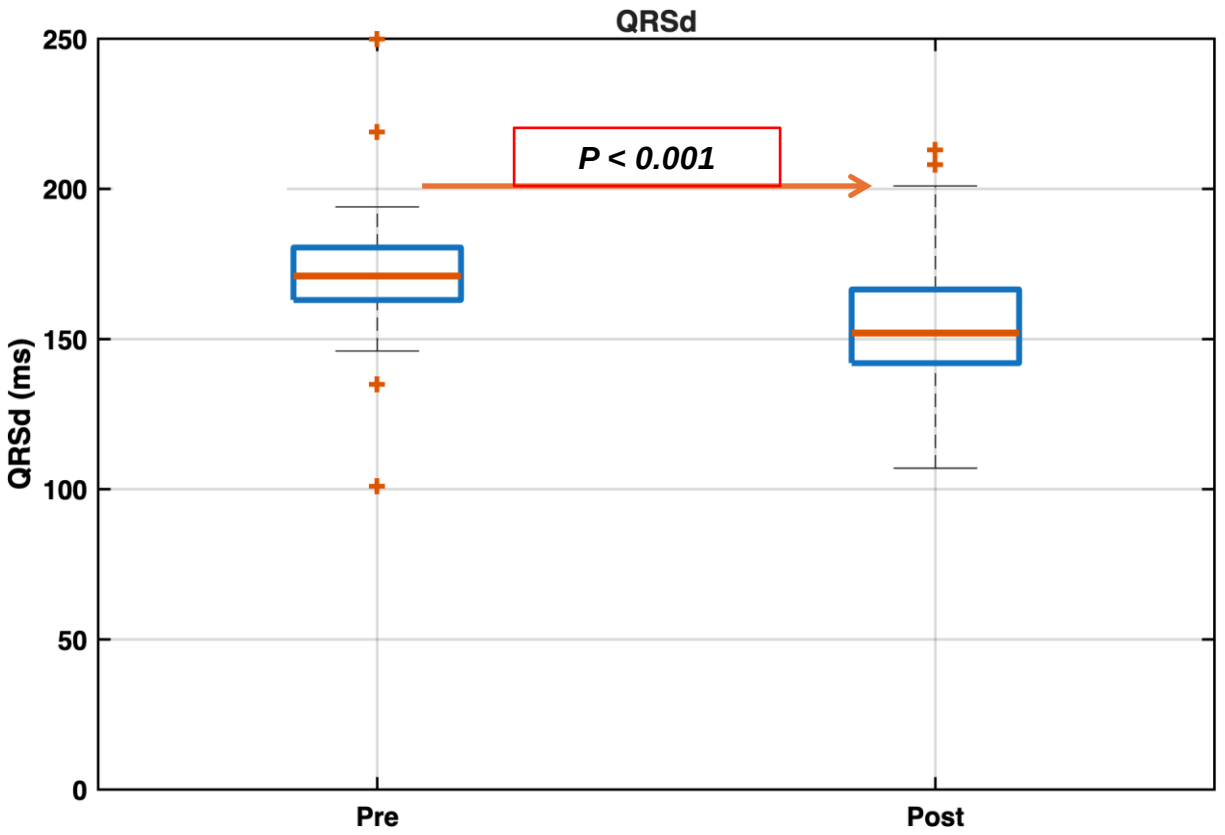


Výsledky – reverzní remodelace



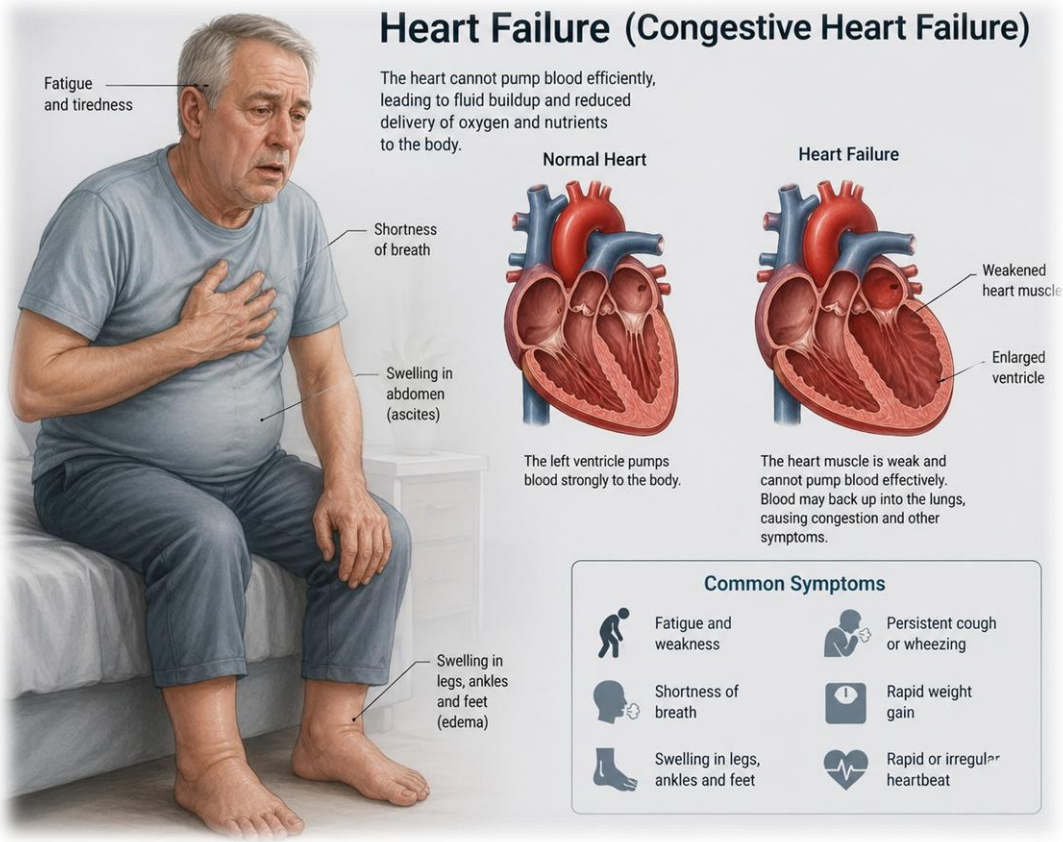
Výsledky – komorová dyssynchronie





Výsledky – symptomy

NYHA class 2.3 → 1.5



Diskuze

Left bundle branch area vs biventricular pacing for cardiac resynchronization therapy: the LEFT-BUNDLE-CRT trial

Óscar Cano [1,2,3,*], Víctor Pérez-Roselló[4], Andrea Di Marco [3,5,6], Javier Ramos-Maqueda[7,8], Pablo Moriña[9], Thomas Brouzet[10], Daniel Rodríguez-Muñoz[11,12], Víctor Castro[13], Sebastian Giacoman[14], Pablo Peñafiel[15], María Rodríguez-Serrano[1,2,3], and Manuel Molina-Lerma [16,17]

emi, je však překvapující tak vysoká míra

JAMA Cardiology | Original Investigation

Long-Term Outcomes of Left Bundle-Branch Pacing vs Biventricular Pacing in Heart Failure
The HeartSync-LBBP Randomized Clinical Trial

Xueying Chen, MD; Xi Liu, MD; Ruogu Li, MD; Zhongkai Wang, MD; Yixiu Liang, MD; Lei Zhang, MD; Wei Wang, MD; Jin Bai, MD; Jingfeng Wang, MD; Shengmei Qin, MD; Weiwei Zhang, MD; Tianbao Yao, MD; Dong Huang, MD; Ting Chen, MD; Xianxian Zhao, MD, PHD; Dening Liao, MD, PHD; Jingbo Li, MD, PHD; Jialiang Mao, MD, PHD; Mihail G. Chelu, MD, PHD; Yangang Su, MD, PHD; Kenneth A. Ellenbogen, MD; Junbo Ge, MD, PHD

JAMA Cardiology | Original Investigation

Conduction System vs Biventricular Pacing in Heart Failure
The PhysioSync-HF Randomized Clinical Trial

André Zimerman, MD, PhD; Alexander dal Forno, MD; Luis E. Rohde, MD, PhD; Caique M. Ternes, MD, PhD; Fernanda D. Alves, PhD; Lucas P. Damiani, PhD; Martino Martinelli-Filho, MD, PhD; Roberto Costa, MD, PhD; Alexsandro A. Fagundes, MD; Rodrigo M. Barbosa, MD; Eduardo B. Gadelha, MD; Carlos Eduardo Lima, MD, PhD; Márcio A. Silva, MD; Jaime A. Maldonado, MD; Julio César de Oliveira, MD, PhD; Fabricio Mallmann, MD; José M. Baggio Júnior, MD; Carlos E. Duarte, MD; Liliane A. de Souza, PhD; Juliana S. Santos, BSc; Anderson D. Silveira, MD, PhD; Sérgio R. R. Decker, MD, PhD; Leandro I. Zimerman, MD, PhD; Carisi A. Polanczyk, MD, PhD; André d'Avila, MD, PhD

Závěr

- LBBAP u pacientů s LBBB redukuje dyssynchronii, vede k vysoké míře respondérství i super-respondérství a redukuje symptomy srdečního selhání.
- Naše výsledky korelují s recentně publikovanými studiemi srovnávajícími BiV CRT a LBBAP avšak ukazují vyšší procento super-respondérství.

Děkuji za pozornost!

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tel.: 267 162 724