Slovensko združenje
paliativne in hospic oskrbe

Načela paliativne oskrbe pri srčnem bolniku

Borut Jug

Klinični oddelek za žilne bolezni UKC Ljubljana
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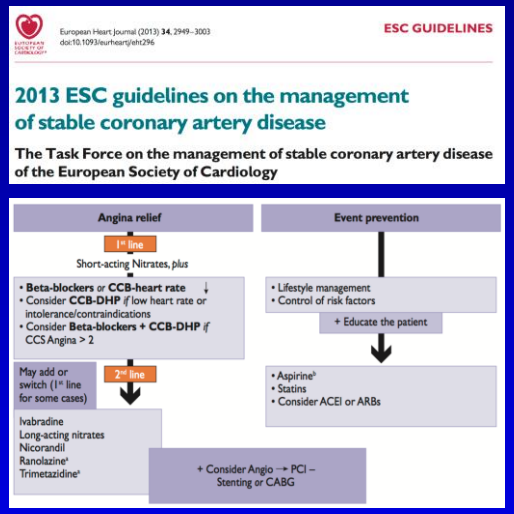
3 ključni sindromi v paliativni oskrbi srčnih bolnikov

- Ishemija srčne mišice
- Motnje srčnega ritma
- Srčno popuščanje

3 ključni sindromi v paliativni oskrbi srčnih bolnikov

- Ishemija srčne mišice
  - 1/3 srčni infarkt
  - 1/3 nenadna srčna smrt
  - 1/3 angina pectoris



PROGNOZA
- **aspirin**
- **statin**
- **obvladovanje dejavnikov tveganja**
- **revaskularizacija pri LM**

SIMPTOMI
- **revaskularizacija**
- **blokatorji beta**
- **nitrati**
- **ivabradin**
- **trimetazidin**
- **ranolazin**
- **obvladovanje tlaka**

3 ključni sindromi v paliativni oskrbi srčnih bolnikov

- Ishemija srčne mišice
- Motnje srčnega ritma

MALIGNE
- **prekatna tahikardija**
- **prekatna fibrilacija**

nenadna srčna smrt
oživljanje
ICD

NEMALIGNE
- **atrijska fibrilacija**
- **nadprekatne tahikardije (AVNRT, AVRT, AT itd)**

Palpitacije
Omotice
Prsne bolečine
Srčno popuščanje

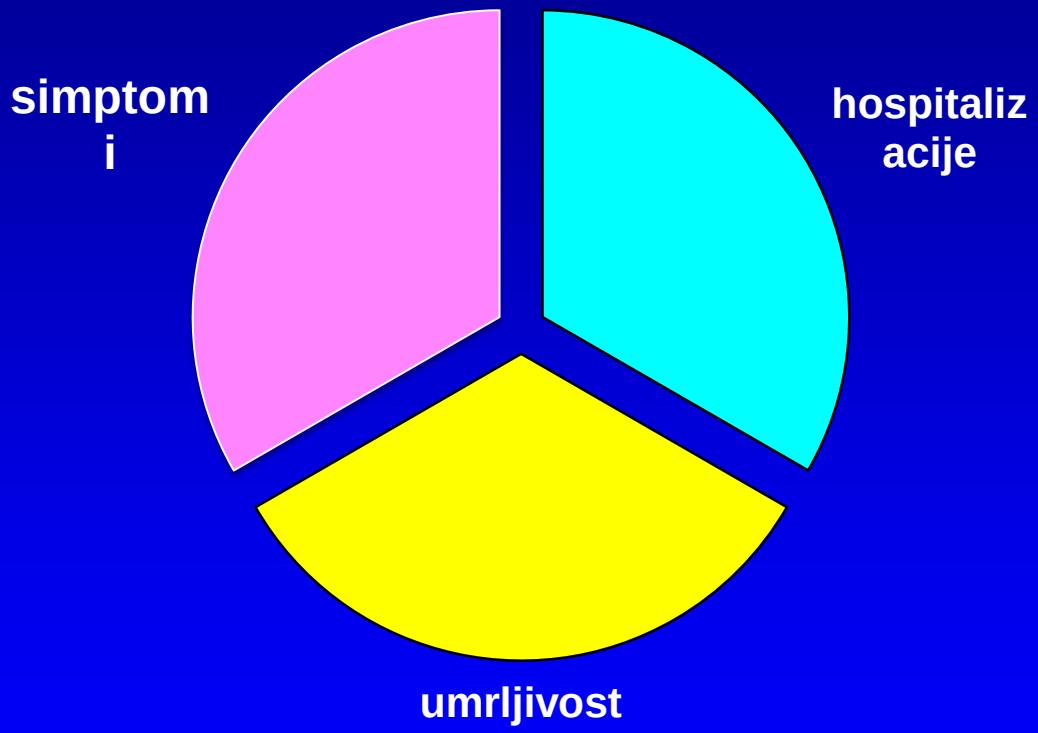
Th osnovne b.
blokatorji beta
kalcijevi ant.
amiodaron
EFŠ

3 ključni sindromi v paliativni oskrbi srčnih bolnikov

- Ishemija srčne mišice
- Motnje srčnega ritma
- Srčno popuščanje

Katera koli srčna bolezen lahko v končni fazi pripelje do srčnega popuščanja

ESC smernice za srčno popuščanje 2016: Prioritete zdravljenja



European Heart Journal (2016) **37**, 2129–2200
doi:10.1093/eurheartj/ehw128

ESC GUIDELINES

2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure

The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC)

Developed with the special contribution of the Heart Failure Association (HFA) of the ESC

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ESC entities having participated in the development of this document:

Associations: Acute Cardiovascular Care Association (ACCA), European Association for Cardiovascular Prevention and Rehabilitation (EACPR), European Association of Cardiovascular Imaging (EACVI), European Heart Rhythm Association (EHRA), Heart Failure Association (HFA).

Councils: Council on Cardiovascular Nursing and Allied Professions, Council for Cardiology Practice, Council on Cardiovascular Primary Care, Council on Hypertension.

Working Groups: Cardiovascular Pharmacotherapy, Cardiovascular Surgery, Myocardial and Pericardial Diseases, Myocardial Function, Pulmonary Circulation and Right Ventricular Function, Valvular Heart Disease.

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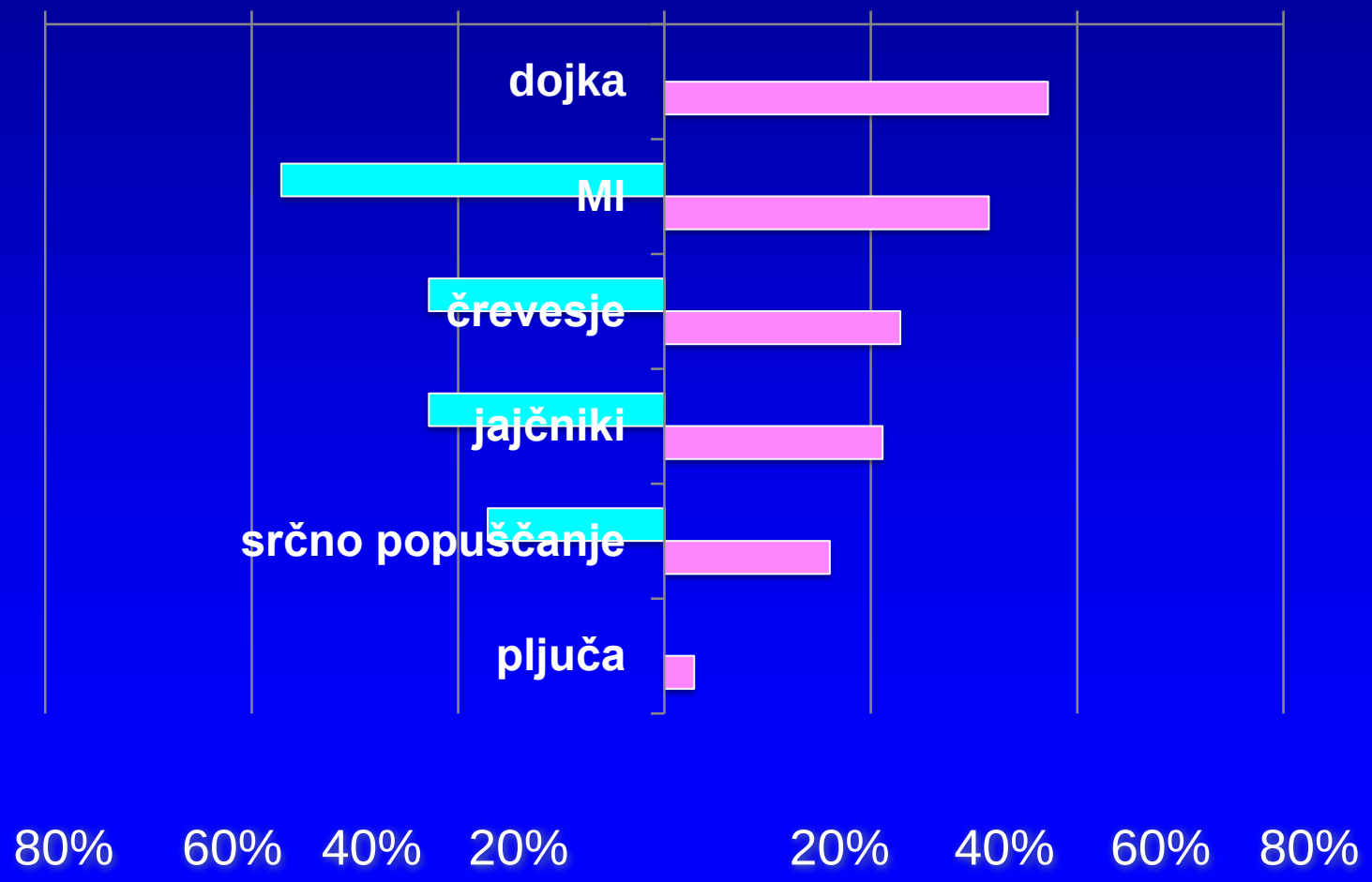
Oris

- Umrljivost in hospitalizacije
- Simptomi in kakovost življenja
- Napredovalo srčno popušanje
- Paliativna oskrba

Oris

- **Umrljivost in hospitalizacije**
- Simptomi in kakovost življenja
- Napredovalo srčno popušanje
- Paliativna oskrba

Prognoza: Srčno popuščanje vs. Rakava obolenja



Prognoza: HFrEF & HFpEF

Lifetime Analysis of Hospitalizations and Survival of Patients Newly Admitted With Heart Failure

Soohun Chun, MD; Jack V. Tu, MD, PhD; Harindra C. Wijeysundera, MD, PhD; Peter C. Austin, PhD; Xuesong Wang, MSc; Daniel Levy, MD; Douglas S. Lee, MD, PhD

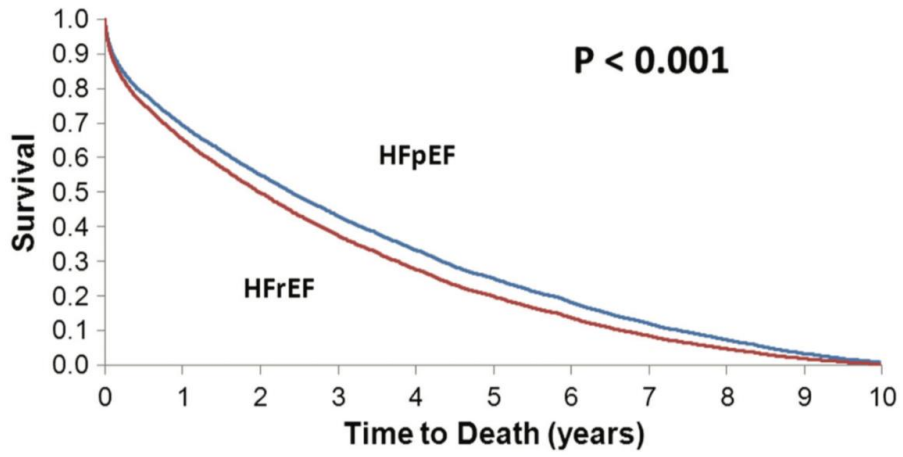


Figure 1. Adjusted survival curve by left ventricular function: HFrEF versus HFpEF. HFpEF indicates heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction.

Circ Heart Fail. 2012;5:414-421

Srčno popuščanje, >1/2 vseh hospitalizacij pri starostnikih!

European Journal of Heart Failure (2016)
doi:10.1002/ejhf.617

National trends in heart failure hospitalization rates in Slovenia 2004–2012

Daniel Omersa[1], Jerneja Farkas[1], Ivan Erzen[1], and Mitja Lainscak[2,3]*

[1]National Institute of Public Health, Ljubljana, Slovenia; [2]Department of Cardiology, Department of Research and Education, General Hospital Celje, Celje, Slovenia; and [3]Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia

Received 20 January 2016; revised 8 June 2016; accepted 26 June 2016

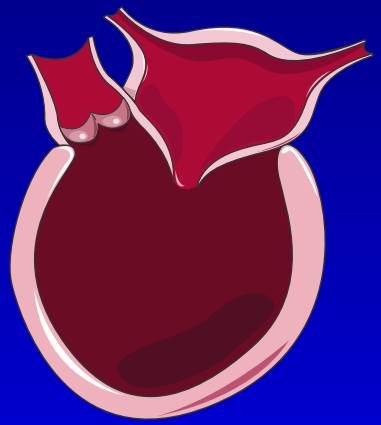
Aims Heart failure (HF) hospitalization rates are decreasing in western Europe, but little is known about trends in central and east European countries. We analysed the Slovenian national hospitalization database to determine the burden of HF hospitalization.

Methods and results The Slovenian National Hospital Discharge Registry was searched for HF hospitalizations between 2004 and 2012 in patients aged ≥20 years. A total of 55 531 main HF hospitalizations (43 636 first HF hospitalizations) in 34 406 patients (median age 78 years, 55% female) were recorded. The most common co-morbidities were arterial hypertension (54.3%), atrial fibrillation (40.6%), diabetes mellitus (24.5%), and ischaemic heart disease (21.9%). The number of age-standardized main and first HF hospitalizations per 100 000 population decreased from 249 to 232 (7.1%, $P = 0.002$) and from 467 to 435 (6.8%, $P = 0.074$), respectively. Crude main and first HF hospitalization rates increased from 249 to 298 (19.8%, $P < 0.001$) and from 530 to 558 (5.4%, $P = 0.100$), respectively. After a first HF hospitalization, any HF readmission rates within 30, 60, and 90 days and at 1 year were 11.7, 17.2, 20.9, and 37.5%, respectively. Hospitalization trends were similar in both sexes and across all age groups. In a multivariate log binomial regression model, myocardial infarction, chronic kidney disease, diabetes mellitus, male sex, and year of admission were independently associated with higher HF readmission rates ($P < 0.01$ for all).

Conclusions In Slovenia, standardized HF hospitalization rates have decreased but the crude HF hospitalization burden has increased. Readmissions were associated with established cardiovascular risk factors.

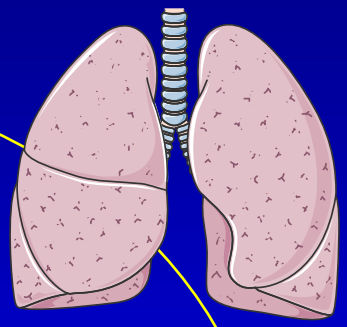
Keywords Heart failure • Hospitalizations • Readmissions • National trends • Epidemiology

Patofiziologija srčnega popuščanja



DISFUNKCIJA PREKATA

HEMODINAMSKE SPREMEMBE



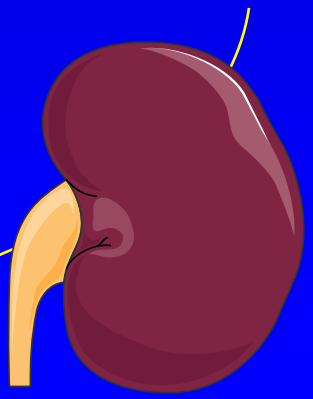
Renin

Simpatično živčevje

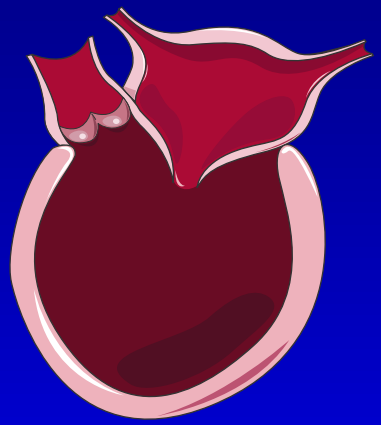
NEVROHUMORALNE SPREMEMBE

Angiotenzin

Aldosteron



Patofiziologija srčnega popuščanja



SIMPTOMI IN ZNAKI

DISFUNKCIJA PREKATA

HEMODINAMSKE SPREMEMBE

Renin

Simpatično živčevje

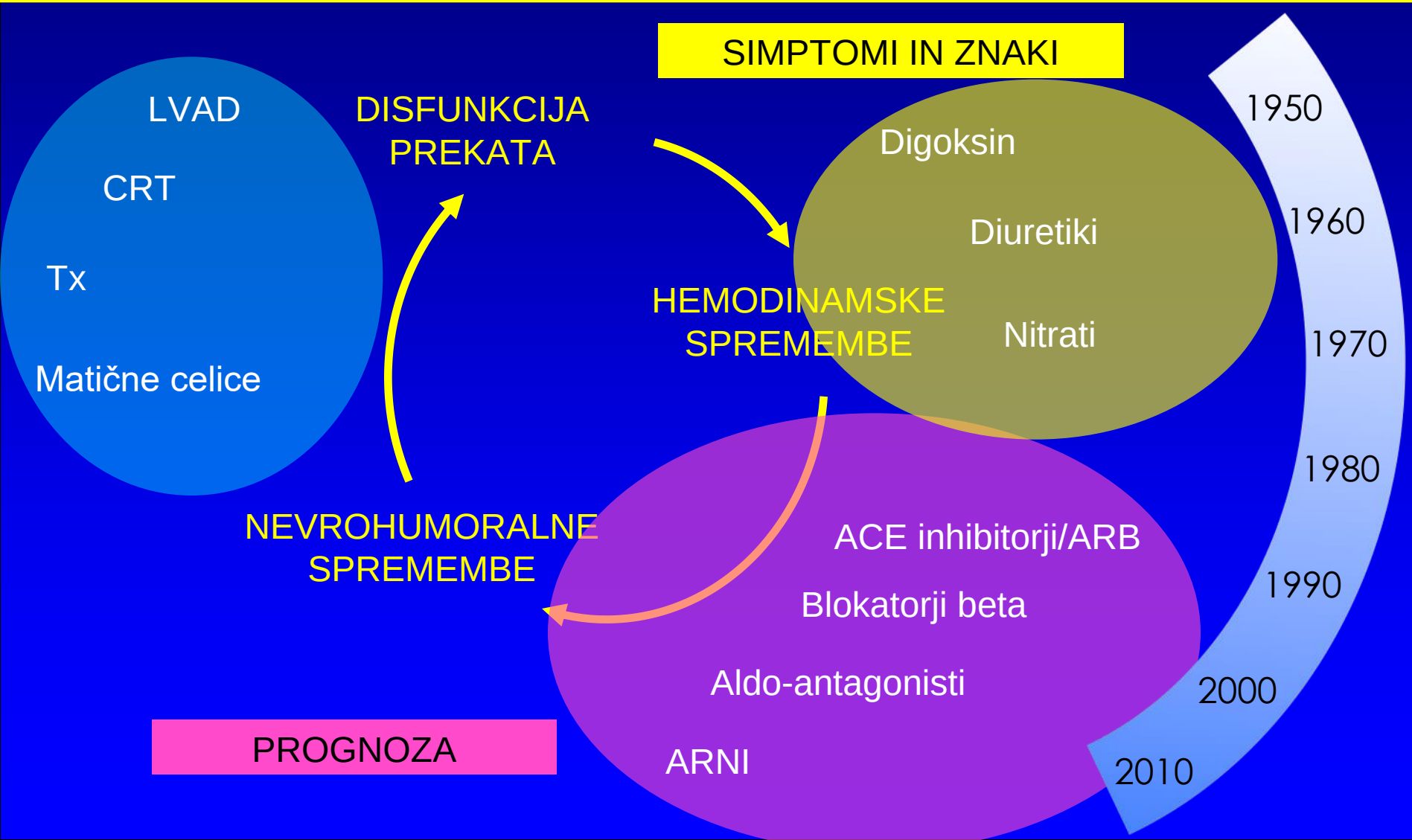
NEVROHUMORALNE SPREMEMBE

Angiotenzin

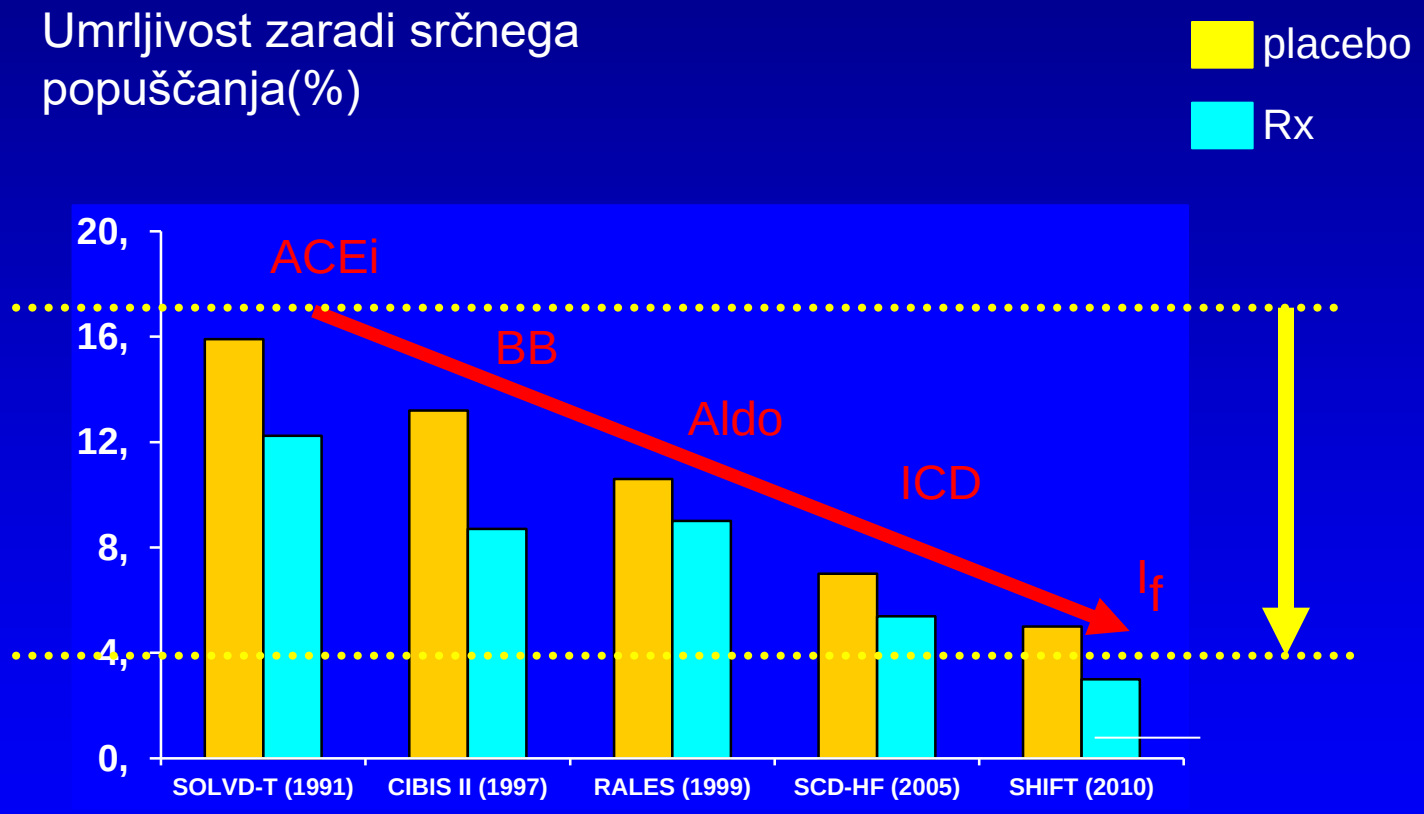
Aldosteron

PROGNOZA

Patofiziologija srčnega popuščanja



Umrljivost zaradi srčnega popuščanja



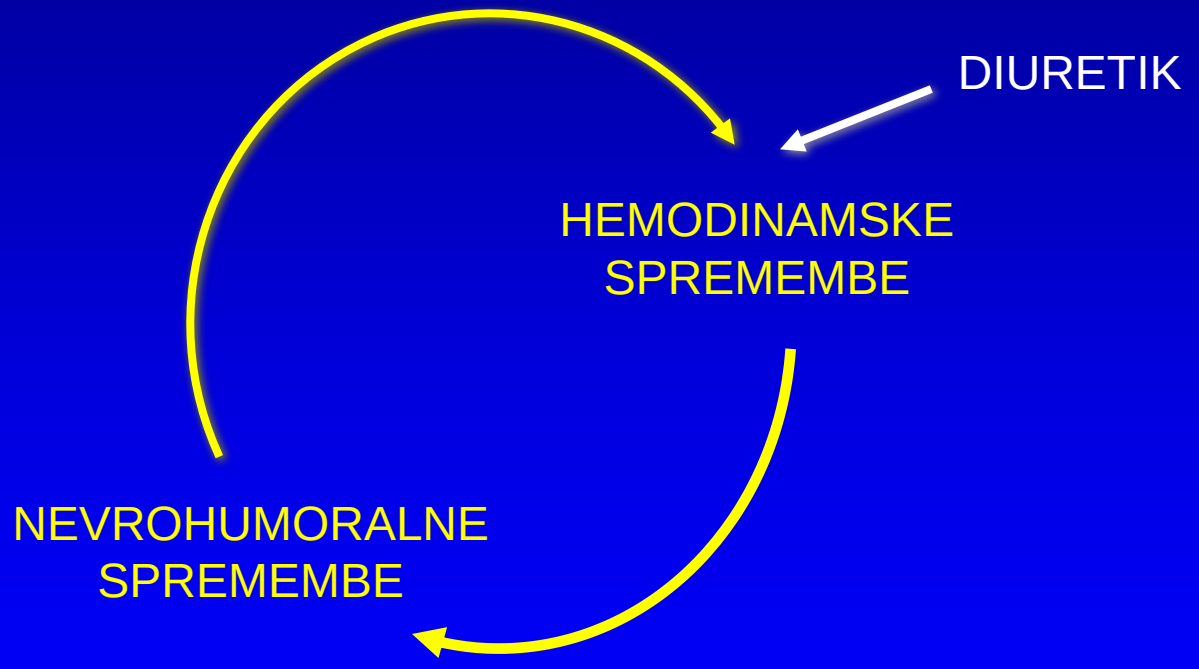
Swedberg K. et al. Lancet 2010.

Oris

- Umrljivost in hospitalizacije
- **Simptomi in kakovost življenja**
- Napredovalo srčno popušanje
- Paliativna oskrba

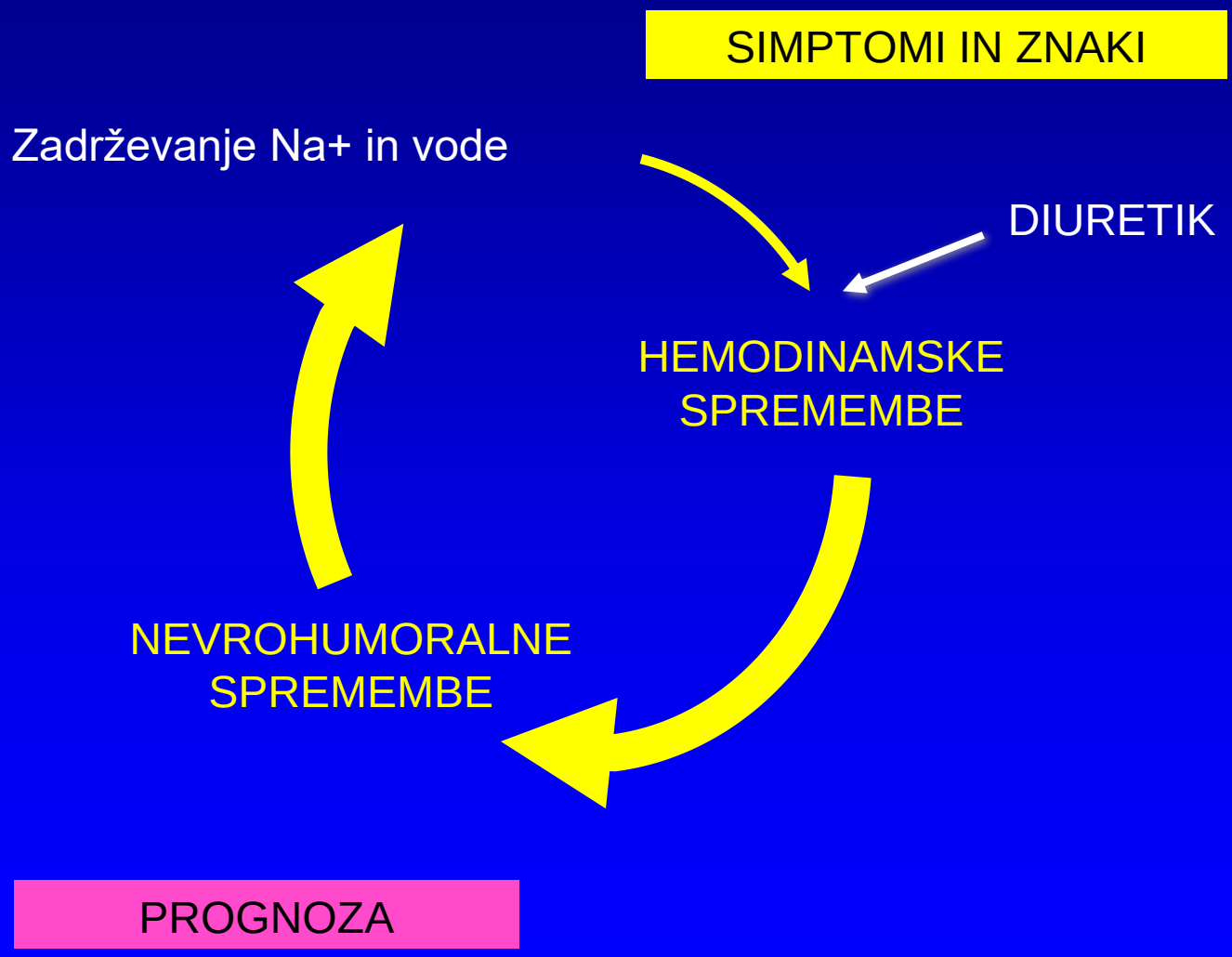
“Simptomatska” vs. “prognostična” zdravila

SIMPTOMI IN ZNAKI

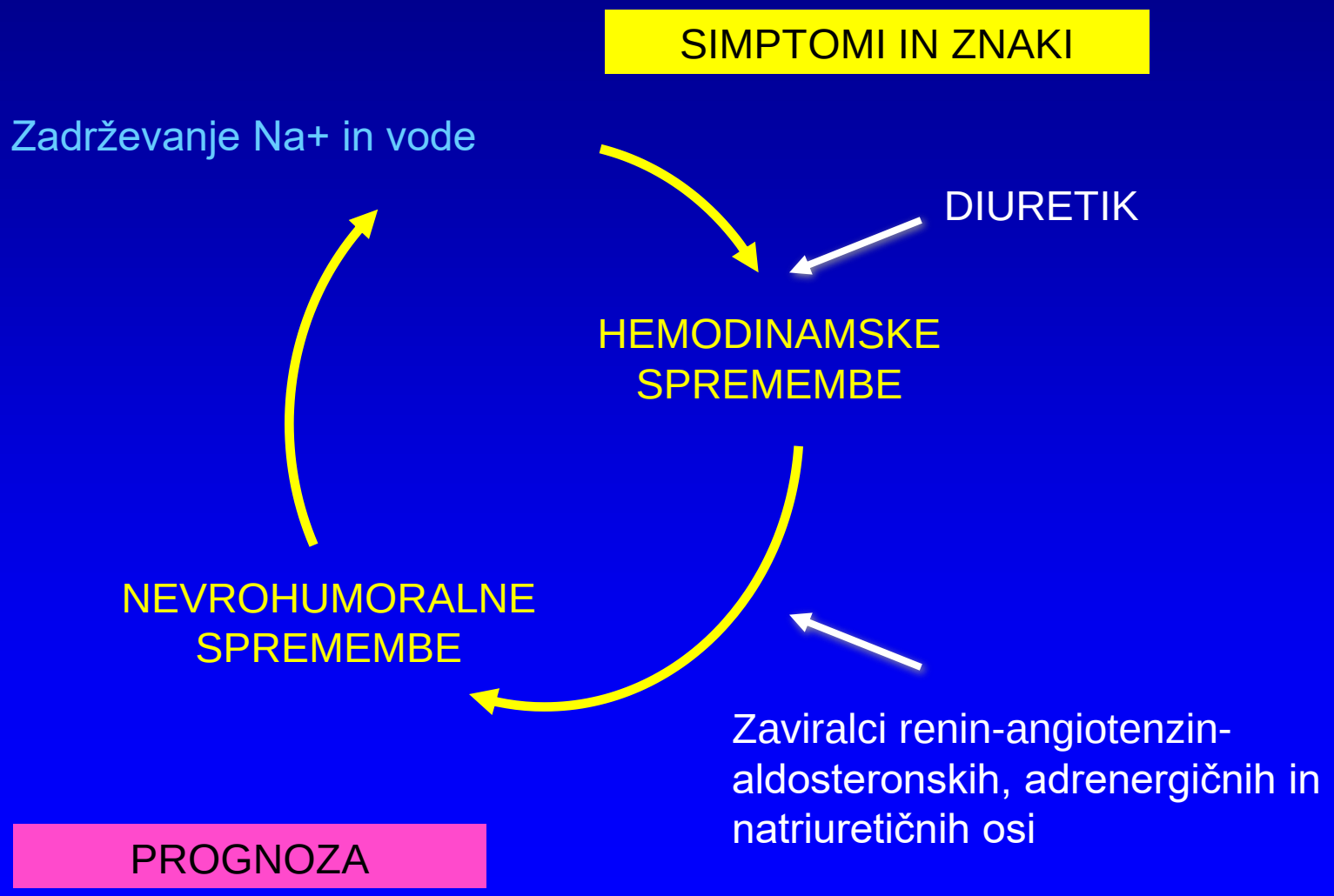


PROGNOZA

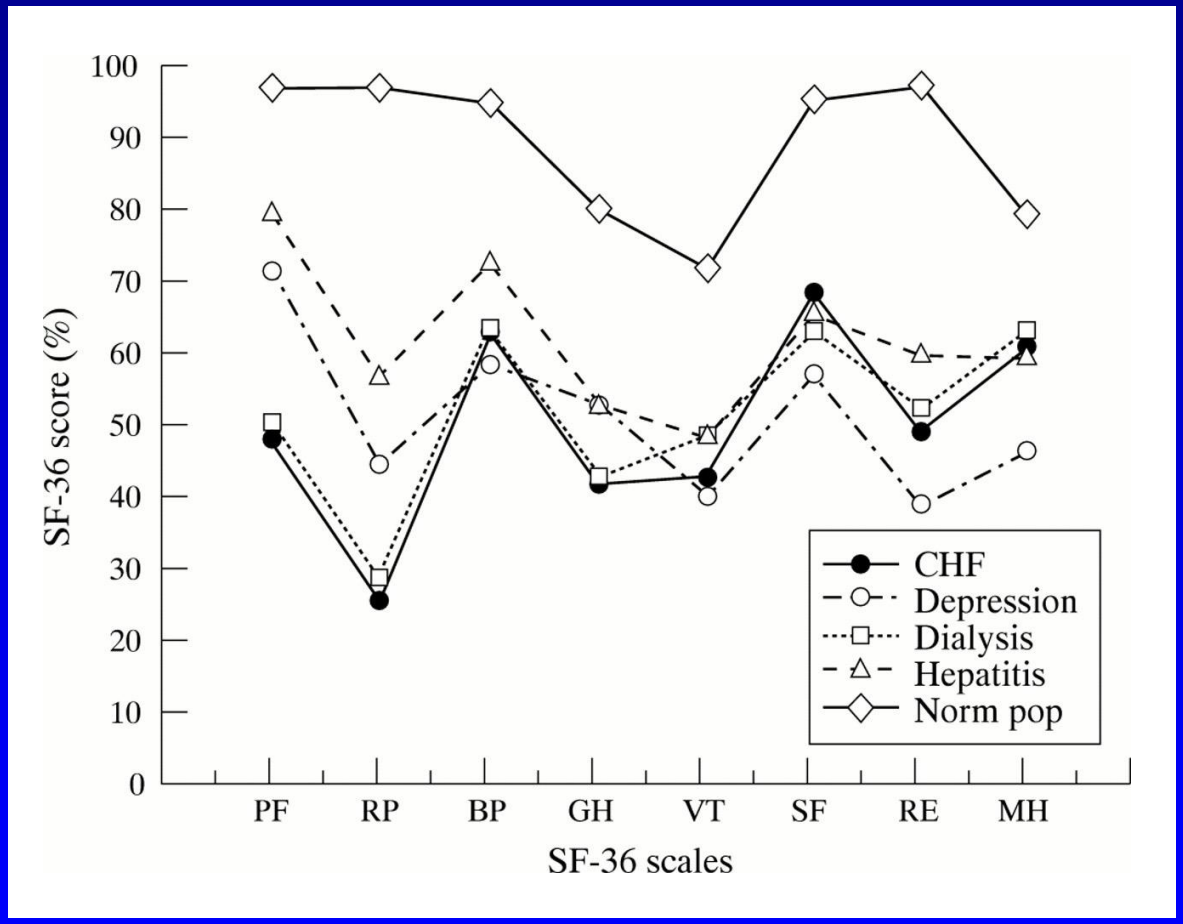
Patofiziologija srčnega popuščanja



Patofiziologija srčnega popuščanja



Simptomi = z boleznijo povezana kakovost življenja

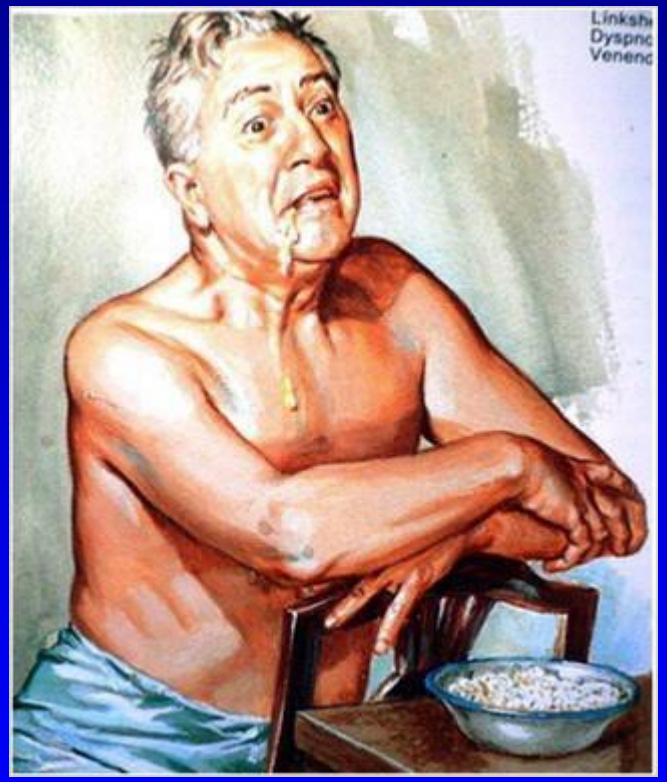


SF-36
906 splošna populacija
205 srčno popuščanje
120 dializa
502 depresija
70 hepatitis

Juenger J et al. Heart 2002;87:235-241

Simptomi srčnega popuščanja

- Utrujenost
- Dispneja
- Bolečina
- Zastojni znaki
- Motnje spanja
- Depresija in anksioznost
- Inapetenca
- Kaheksija



Zdravljenje srčnega popuščanja in kakovost življenja

	Kakovost	Prognoza
ACE zaviralci	+	+++
Blokatorji beta	+/-	+++
Aldo-antagonisti	+	+++
ARNI	-	+++
Ivabradin	+	+
Diuretiki	+++	-
Nitrat	++	-
Digoksin	+	-

120 intervencijskih raziskav
44 spremljalo kakovost življenja
27 kakovostnih:
- 2 predčasno zaključeni
- 10 pozitivnih
- 15 negativnih

Zdravljenje srčnega popuščanja in kakovost življenja

	Kakovost	Prognoza
ACE zaviralci	+	+++
Blokatorji beta	+/-	+++
Aldo-antagonisti	+	+++
ARNI		
Ivabradi		
Diuretik		
Nitrat		
Digoksi		

Ampak pozor: Blokator beta:

- pri IBS:
  - podaljša življenje po infarktu, ne vpliva pa na simptome (če bolnik nima angine pectoris)
  - izboljša simptome pri angini pectoris, ne podaljša pa življenja (će bolnik ni prebolel infarkta)
- pri AFib:
  - ne podaljšajo preživetja pri atrijski fibrilaciji, preprečijo pa tahikardiomiopatijo (simptome srčnega popuščanja)

Oris

- Umrljivost in hospitalizacije
- Simptomi in kakovost življenja
- **Napredovalo srčno popušanje**
- Paliativna oskrba

Primer #1

- **1980 (29 let):** MI sprednje stene (tromboliza); *hipertrigliceridemija, družinska anamneza*
- **1990 (39 let):** AP; CABG LAD, RCA
- **2000 (49 let):** srčni zastoj (VF); ICD
- **2002 (52 let):** MI zadnje stene; re-CABG LAD, M1 in PDA, MVR; *SB II tbl*
- **2004 (54 let):** VT na holterju, ICD
- **2007 (57 let):** CVI z levostransko prizadetostjo; *SB II insulin; KLB*

Februar 2008: Pregled pri izbranem družinskem zdravniku

- S: Napredujoča dispneja (100 m hoje)
- O: Zastoj nad pljuči, RR 90/50, reden pulz 55’, TT 89 kg, otekanje v trebuh in noge
- Th:
  - Bisoprolol 10 mg
  - Ramipril 10 mg
  - Spironolakton 25 mg
  - Ivabradin 2 x 7,5 mg
  - Furosemid 40 mg p.p.
  - Atorvastatin 40 mg
  - Varfarin po shemi

Marec 2008: pregled pri kardiologu

- EKG: sinusni ritem, fr. 55/min, brazgotina spodnje in sprednje stene, obremenitev LV, QRS 90 ms
- RTG pc: zastoj, manjši plevralni izliv obojestransko
- Lab: sečnina 20.1; kreatinin 156; Na 133; CRP 4; Hb 125
- Eho: EDD 7.4; difuzna hipokinezija LV, LVEF 15-20%; dilatacija preddvorov in DV, umetna mitralna zaklopka primerna, pljučna hipertenzija (44 mmHg + CVP)
- Srčna kateterizacija: delujoča presadka na LAD in D1, RCA in LCX se dobro polnita preko kolateral
- 6-minutni test s hojo: 200 m

1. Ali lahko odpravimo vzrok/precipitator?

- S: Napredujoča dispneja (100 m hoje)
- O: Zastoj nad pljuči, RR 90/50, reden pulz 55’, TT 89 kg, otekanje v trebuh in noge
- Th:
  - Bisoprolol 10 mg
  - Furosemid 40 mg p.p.
  - Atorvastatin 40 mg
  - Aspirin 100 mg
  - NTG tts 0,4 mg/h/12h

- EKG: sinusni ritem, fr. 55/min, brazgotina spodnje in sprednje stene, obremenitev LV, QRS 90 ms
- RTG pc: zastoj, manjši plevralni izliv obojestransko
- Lab: sečnina 20.1; kreatinin 156; Na 133; CRP 4; Hb 125
- Eho: EDD 7.4; difuzna hipokinezija LV, LVEF 15-20%; dilatacija preddvorov in DV, umetna mitralna primerna, pljučna a (44 mmHg + CVP)
- terizacija: delujoča presadka na LAD in D1, RCA in LCX se dobro polnita preko kolateral
- 6-minutni test s hojo: 200 m

Vzroka ne moremo odpraviti ✔

Ni precipitatorja ✔

2. Ali lahko izboljšamo temeljno zdravljenje?

- S: Napredujoča dispneja (100 m hoje)
- O: Zastoj nad pljuči, RR 90/50, reden pulz 55', TT 89 kg, otekanje v trebuh in noge
- Th:
  - Bisoprolol 10 mg
  - Ramipril 10 mg
  - Spironolakton 25 mg
  - Ivabradin 2 x 7,5 mg
  - Furosemid 40 mg p.p.
  - Atorvastatin 40 mg
  - Aspirin 100 mg
  - NTG tts 0,4 mg/h/12h

- EKG: sinusni ritem, fr. 55/min, brazgotina spodnje in sprednje stene, obremenitev LV, QRS 90 ms
- RTG pc: zastoj, manjši plevralni

Temeljno zdravljenje:

1. ACE-zaviralec ✔
2. Blokator beta ✔
3. Spironolakton ✔
4. Ivabradin ✔

- Srčna kateterizacija: delujoča presadka na LAD in D1, RCA in LCX se dobro polnita preko kolateral
- 6-minutni test s hojo: 200 m

3. Ali lahko izboljšamo simptomatsko zdravljenje?

- S: Napredujoča dispneja (100 m hoje)
- O: Zastoj nad pljuči, RR 90/50, reden pulz 55’, TT 89 kg, otekanje v trebuh in noge
- Th:
  - Bisoprolol 10 mg
  - Ramipril 10 mg
  - Spironolakton 25 mg
  - Ivabradin 2 x 7,5 mg
  - Furosemid 40 mg p.p.
  - Atorvastatin 40 mg
  - Aspirin 100 mg
  - NTG tts 0,4 mg/h/12h

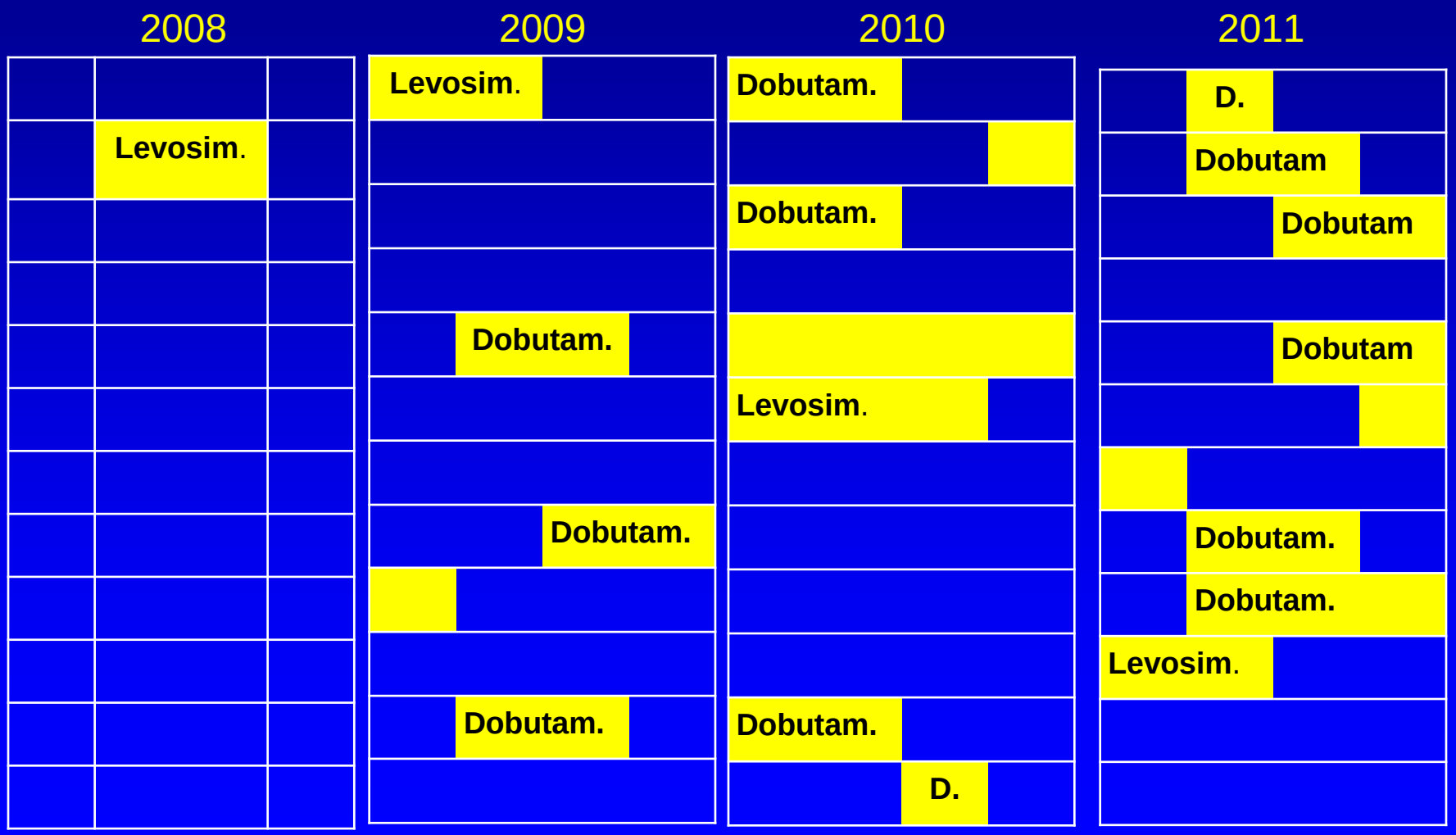
- EKG: sinusni ritem, fr. 55/min, brazgotina spodnje in sprednje stene, obremenitev LV, QRS 90 ms
- RTG pc: zastoj, manjši plevralni

Temeljno zdravljenje:

1. Diuretik ↑
2. Nitrat +
3. Digoksin?

- Srčna kateterizacija: delujoča presadka na LAD in D1, RCA in LCX se dobro polnita preko kolateral
- 6-minutni test s hojo: 200 m

In potem … ?
Hospitalizacije: 17-krat v 4 letih!



… na koncu …

- Zamenjana baterija ICD
- Poskus zdravljenja z matičnimi celicami
- Še 1x aplikacija levosimendana in 3x dobutamina
- Zadnja hospitalizacija: 32 dni, zadnje 3 dni prejemal MST 2x10 mg
- 17. januarja 2012: črpalna odpoved, apneja, asistolija; DNR
- Atorvastatin prejel še večer pred smrtjo

Napredovalo srčno popuščanje

FIZ

- LV
- Re
- Po
- Po

VOST

opravil

KONTRAINDIKACIJE (vse bolj relativne!)

- Starost
- Sladkorna bolezen
- Malignom
- Okužba
- Neobvladljiva bolezen jeter/ledvic/pljuč
- Psihološki zadržki
- Nereverzibilna pljučna hipertenzija

ALTERNATIVE (vse pogostejše)

Neodziv na standardno zdravljenje po 3 mesecih

Oris

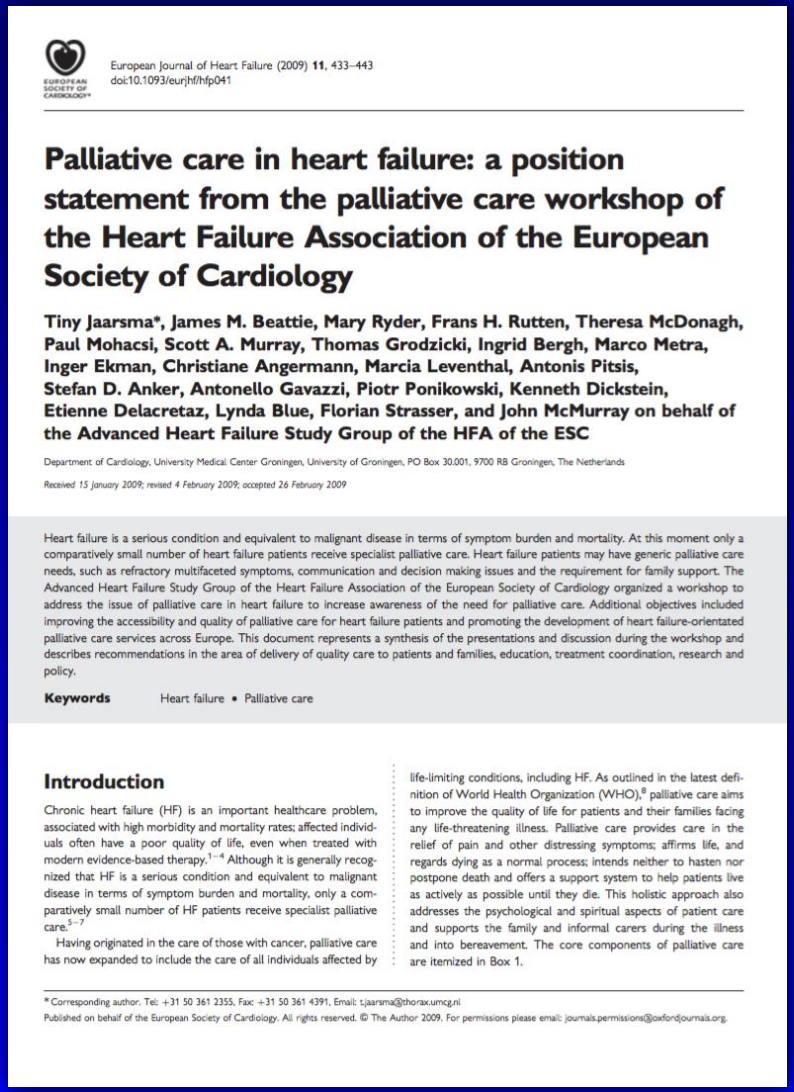
- Umrljivost in hospitalizacije
- Simptomi in kakovost življenja
- Napredovalo srčno popušanje
- **Paliativna oskrba**

Paliativa: Smernice

Abbreviations and acronyms

ACC/AHA	American College of Cardiology/American Heart Association
ACCF/AHA	American College of Cardiology Foundation/American Heart Association
ACE	angiotensin-converting enzyme
ACEI	angiotensin-converting enzyme inhibitor
ACS	acute coronary syndrome
AF	atrial fibrillation
AHF	acute heart failure
AHI	apnoea/hypopnoea index
AIDS	acquired immunodeficiency syndrome
AKI	acute kidney injury
Aldo-DHF	aldosterone receptor blockade in diastolic heart failure
AL	amyloid light chain
ALT	alanine aminotransferase

Paliativa: Smernice



European Journal of Heart Failure (2009) **11**, 433–443
doi:10.1093/eurjhf/hfp041

Palliative care in heart failure: a position statement from the palliative care workshop of the Heart Failure Association of the European Society of Cardiology

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Received 15 January 2009; revised 4 February 2009; accepted 26 February 2009

Heart failure is a serious condition and equivalent to malignant disease in terms of symptom burden and mortality. At this moment only a comparatively small number of heart failure patients receive specialist palliative care. Heart failure patients may have generic palliative care needs, such as refractory multifaceted symptoms, communication and decision making issues and the requirement for family support. The Advanced Heart Failure Study Group of the Heart Failure Association of the European Society of Cardiology organized a workshop to address the issue of palliative care in heart failure to increase awareness of the need for palliative care. Additional objectives included improving the accessibility and quality of palliative care for heart failure patients and promoting the development of heart failure-orientated palliative care services across Europe. This document represents a synthesis of the presentations and discussion during the workshop and describes recommendations in the area of delivery of quality care to patients and families, education, treatment coordination, research and policy.

Keywords Heart failure • Palliative care

Introduction

Chronic heart failure (HF) is an important healthcare problem, associated with high morbidity and mortality rates; affected individuals often have a poor quality of life, even when treated with modern evidence-based therapy.[1–4] Although it is generally recognized that HF is a serious condition and equivalent to malignant disease in terms of symptom burden and mortality, only a comparatively small number of HF patients receive specialist palliative care.[5–7]

Having originated in the care of those with cancer, palliative care has now expanded to include the care of all individuals affected by life-limiting conditions, including HF. As outlined in the latest definition of World Health Organization (WHO),[8] palliative care aims to improve the quality of life for patients and their families facing any life-threatening illness. Palliative care provides care in the relief of pain and other distressing symptoms; affirms life, and regards dying as a normal process; intends neither to hasten nor postpone death and offers a support system to help patients live as actively as possible until they die. This holistic approach also addresses the psychological and spiritual aspects of patient care and supports the family and informal carers during the illness and into bereavement. The core components of palliative care are itemized in Box 1.

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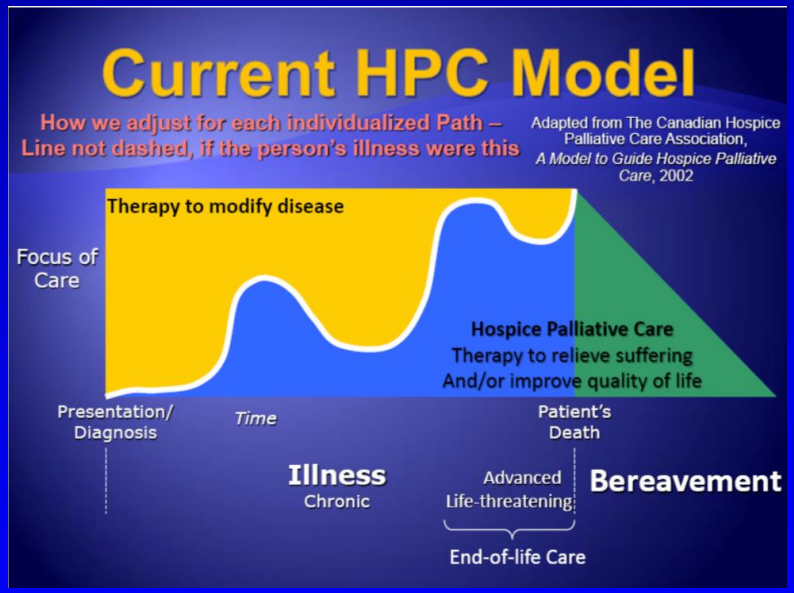
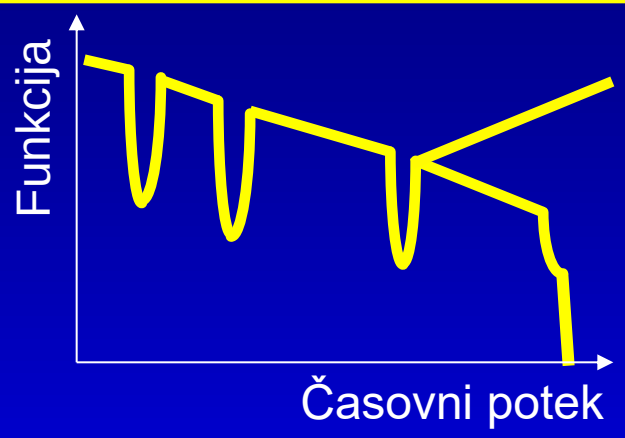


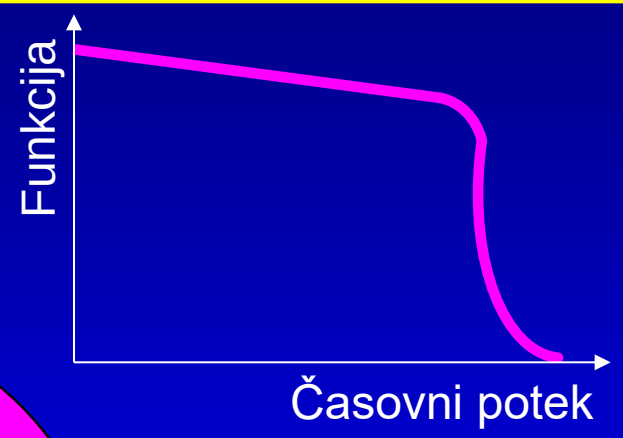
Paliativna oskrba pri srčnem popuščanju: ovire

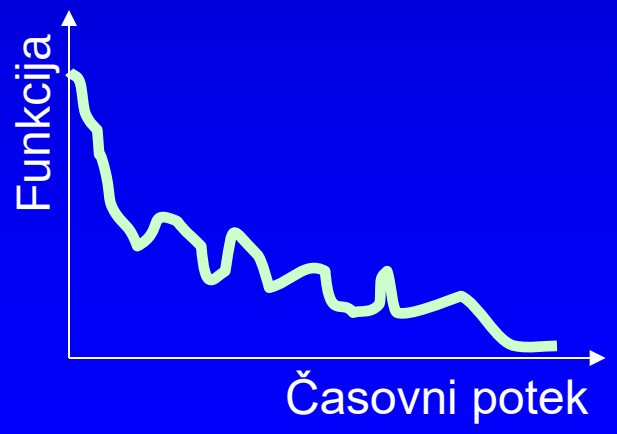
1. Potek: nepredvidljiv
2. Prognosticiranje: nezanesljivo
3. Percepcija: drugačna kot npr. pri raku
4. Pacient in svojci
5. Praksa in zdravniki

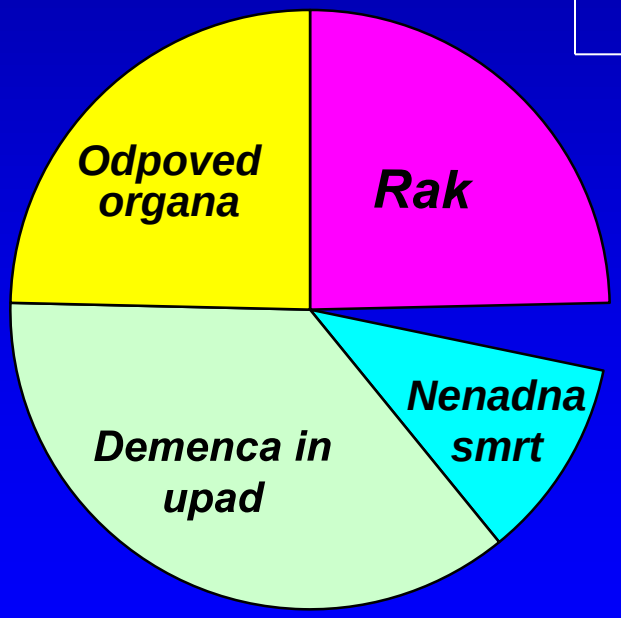
1) Potek in razplet kronične bolezni



Nove možnosti zdravljenja







Primer #2: Nove možnosti zdravljenja - blagoslov ali prekletstvo?

- 87-letna bolnica
- aortna stenoza
  1. huda - AVA 0,6 cm2
  2. simptomatična
     - znaki srčnega popuščanja - obvladljivi z zdravili
     - stekoardije ob naporu (1x/teden)

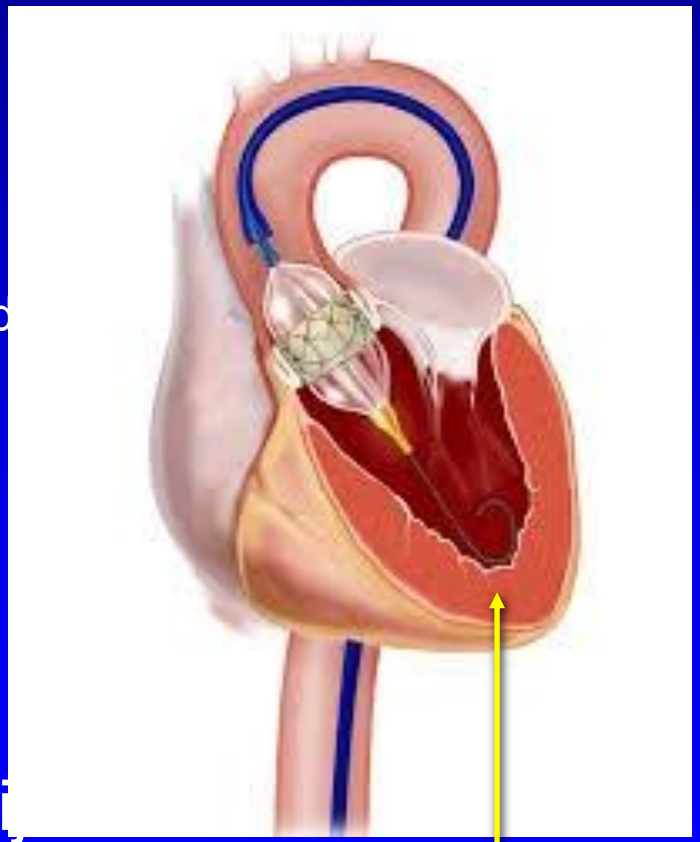
} **indikacije za op.**

- SB2, debelost (ITM 41 kg/m2), KLB IV stopnje, slaba pomičnost (osteoporoza in osteoartroza)

} **kontraindikacije**

Primer #2: Nove možnosti zdravljenja - blagoslov ali prekletstvo?

- 89-letna bolnica (2 leti kasneje)
- aortna stenoza
  1. huda - AVA 0,4 cm2
  2. simptomatična
     - znaki srčnega popuščanja - težje obvlad zdravili, dispnjea v mirovanju
     - stekoardije ob naporu (2-3x/teden)
- SB2, KLB IV stopnje, slaba pomičnost (osteoporoza in osteoartroza)
- shujšala (ITM 34 kg/m2) - kaheksi
- **vnukinja (štud. medicine) preverja možnost TAVI**



Primer #2: Nove možnosti zdravljenja - blagoslov ali prekletstvo?

- 89-letna bolnica
- sprejeta v bolnišnico za preiskave pred TAVI
- koronarografija pokaže zožitev LM, interventni kardiolog se odloči za poskus širjenja in stentiranja
- med stentiranjem pride do pljučnega edema - bolnica intubirana 48h, nato premeščena na oddelek
- 37-dnevna hospitalizacija z zapleti (pljučnica, srčno popuščanje, poslabšanje KLB)
- srčni tim odstopi od nadaljnjega inv. zdravljenja
- **bolnica vpraša: "Smo prišli do konca, kajne?"**

2) Prognosticiranje

Table IV-3 *Odds ration (unadjusted and adjusted) for prediction of cardiovascular death, hospitalizations and functional decline ssing optimal cut-offs (obtained from respective ROC curves using the highest combined sensitivity and specificity for predetermined end-points).*

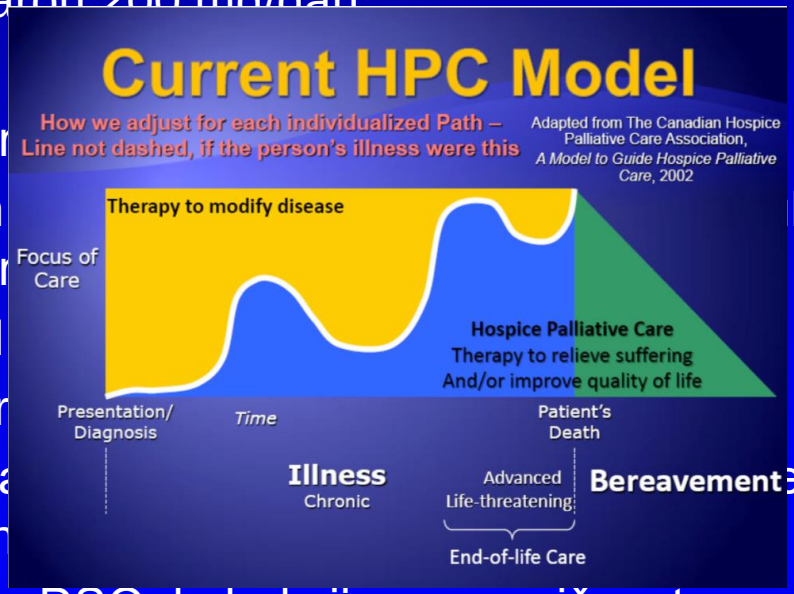
	Cardiovscular death				Hospital admission				Functional decluine			
	OR (95% CI)	p	OR (95% CI)	p	OR (95%CI)	p	OR	p	OR (95%CI)	p
NT-proBNP	3.782 (1.274-11.225)	0.017	0.549 (0.289-1.043)	0.067	6.487 (1.685-24.929)	0.007	7.557 (3.687-15.486)	0.000	4.181 (1.448-12.022)	0.008
QTc	6.637 (1.556-28.308)	0.000	3.017 (1.313-6.935)	0.009	0.481 (0.128-1.802)	0.277	1.600 (0.773-3.312)	0.206	0.551 (0.118-2.575)	0.449
QRS	1.635 (0.298-8.967)	0.571	0.640 (0.262-1.564)	0.327	1.627 (0.385-6.873)	0.508	1.838 (0.854-3.953)	0.119	6.711 (1.631-27.778)	0.008
6-minut walk distance	3.704 (1.267-10.526)	0.014	3.497 (1.812-6.849)	0.000	0.943 (0.236-3.778)	0.934	3.205 (1.678-6.135)	0.000	4.367 (1.435-13.333)	0.009
MLHF	2.491 (0.821-7.556)	0.107	1.198 (0.629-2.281)	0.582	0.948 (0.282-3.192)	0.931	0.996 (0.521-1.906)	0.990	0.588 (0.224-1.541)	0.280
Hemoglobin	2.110 (0.549-8.265)	0.284	6.135 (2.933-12.988)	0.000	12.156 (4.444-125.0)	0.000	1.942 (0.951-3.968)	0.069	1.481 (0.510-4.310)	0.470
NYHA III	3.997 (1.411-11.325)	0.009	5.374 (2.733-10.545)	0.000	5.374 (2.733-10.565	0.000	2.220 (1.176-4.191)	0.014	1.629 (1.010-3.928)	0.046
Diabetes mellitus	1.206 (0.434-3.661)	0.672	4.564 (2.298-9.060)	0.000	18.154 (3.862-85.336)	0.000	1.421 (0.730-2.762)	0.302	0.351 (0.108-1.143)	0.082
Coronary artery disease	1.095 (0.391-3.064)	0.863	1.918 (1.010-3.646)	0.047	0.404 (0.111-1.477)	0.171	1.344 (0.710-2.541)	0.364	1.959 (0.705-5.441)	0.197
creatinine	3.269 (1.126-9.491)	0.029	2.727 (1.007-6.491)	0.049	1.512 (0.342-6.684)	0.585	1.738 (0.901-3.354)	0.099	1.598 (0.524-4.878)	0.410
Age	2.262 (0.764-6.701)	0.141	1.373 (0.733-2.570)	0.322	2.546 (0.609-10.638)	0.200	1.404 (0.760-2.596)	0.278	1.044 (0.351-3.103)	0.983
Gender	1.280 (0.423-3.869)	0.662	1.596 (0.809-3.148)	0.177	1.243 (0.257-6.005)	0.787	1.416 (0.723-2.778)	0.310	0.700 (0.232-2.113)	0.526
LVEF	5.208 (1.425-18.868)	0.013	1.821 (0.959-3.460)	0.067	0.350 (0.094-1-310)	0.119	2.611 (1.344-5.076)	0.005	0.613 (0.202-1.859)	0.387

LVEF – left ventricular ejection fraction; MLHF – Minnesota living with heart failure questionnaire score

Jug B et al, Slov Kardiol 2014

Primer #3: Paliativna vs. terminalna oskrba?

- **od leta 2004** (76 let) se vodi zaradi DKMP z LVEF 35%
- rehabilitacija; nato zelo aktiven, smuča, redne kontrole klinično bp, LVEF ostaja 30-35 %
- zaradi neobstojnih VT prejema amiodaron 200 mg/dan
- **2014 (86) let:**
  - žena umre zaradi subarahnoidne kr
  - na RTG pc naključno odkrijejo sum kine amiodaron zaradi suma na amiodar
- **oktobra 2014:** atrijska fibrilacija, upad
- **spomladi 2015:** rehabilitacija, ne napr
- **pozimi 2015-2016:** 2x hospitaliziran za eža upade z 72 kg na 60 kg, brez zastojnih
- **september 2016 (88 let):** oskrbovanec DSO, kaheksija, nepomičnost;
- **pripeljan na ambulantni pregled na ležečem vozičku (bolnik sam in svojci želeli pregled pri meni), navodila za paliativno oskrbo, 5 dni kasneje umrl.**



3) Percepcija

Dying of lung cancer or cardiac failure: prospective qualitative interview study of patients and their carers in the community

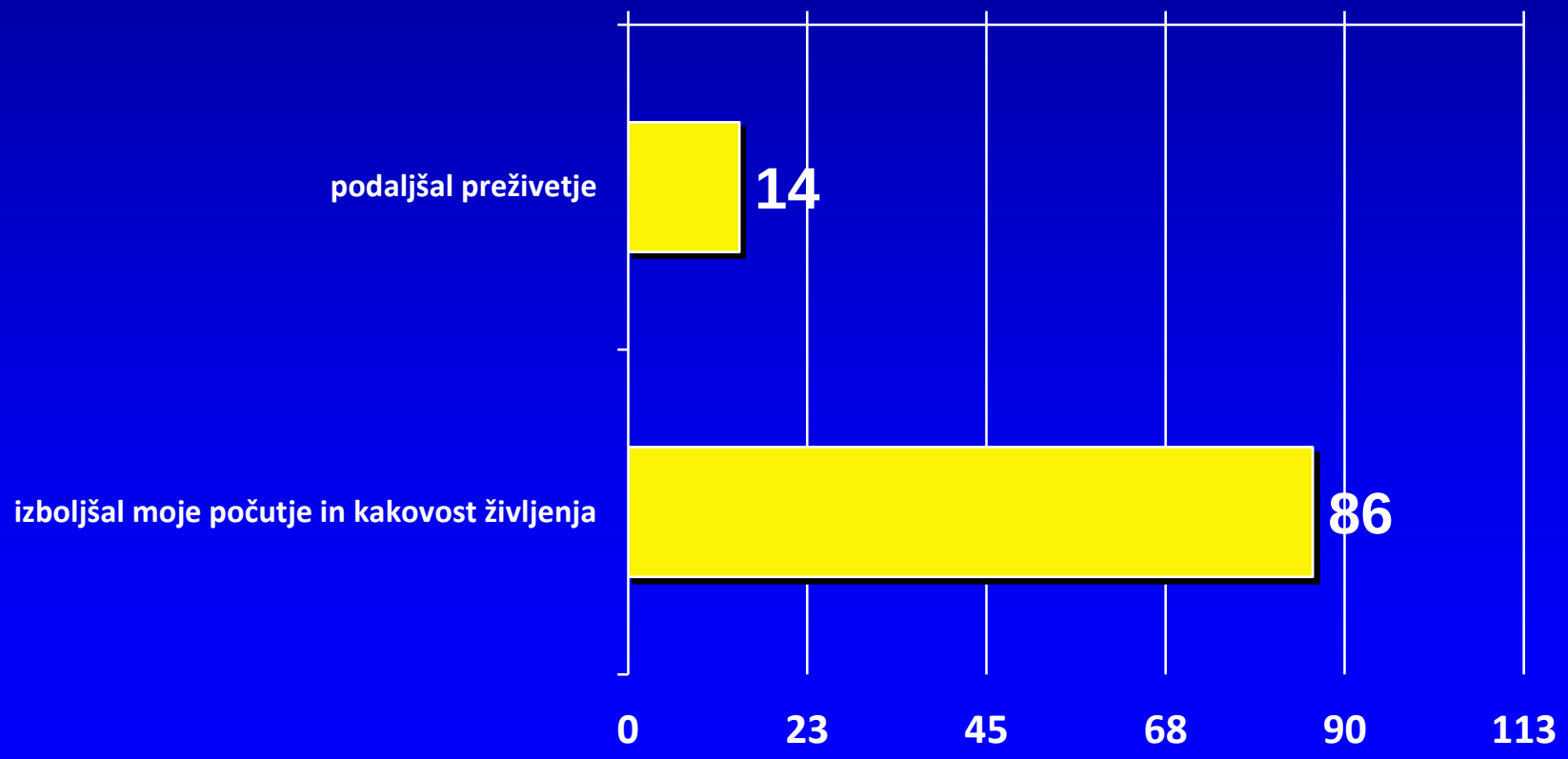
Scott A Murray, Kirsty Boyd, Marilyn Kendall, Allison Worth, T Fred Benton, Hans Clausen

Box 1: Outline comparison of experience of patients

Lung cancer	Cardiac failure
• Cancer trajectory with clearer terminal phase; able to plan for death	• Gradual decline punctuated by episodes of acute deterioration; sudden, usually unexpected death with no distinct terminal phase
• Initially feel well but told you are ill	• Feel ill but told you are well
• Good understanding of diagnosis and prognosis	• Little understanding of diagnosis and prognosis
• "How long have I got?"	• "I know it won't get better, but I hope it won't get any worse"
• Relatives anxious	• Relatives isolated and exhausted
• Swinging between hope and despair	• Daily grind of hopelessness
• Lung cancer takes over life and becomes overriding concern	• Much comorbidity to cope with; heart often not seen as main issue
• Treatment calendar dominates life, more contact with services and professionals	• Shrinking social world dominates life, little contact with health and social services
• Feel worse on treatment: coping with side effects	• Feel better on treatment: work of balancing and monitoring in the community
• Financial benefits accessible	• Less access to benefits with uncertain prognosis
• Specialist services often available in the community	• Specialist services rarely available in the community
• Care prioritised early as "cancer" and later as "terminally ill"	• Less priority as a "chronic disease" and less priority later as uncertain if yet "terminally ill"

4) Pacient: Anketa med laično javnostjo (n=850)

"Če bi imeli srčno popuščanje, bi želeli, da vas zdravijo na način, ki bi …"

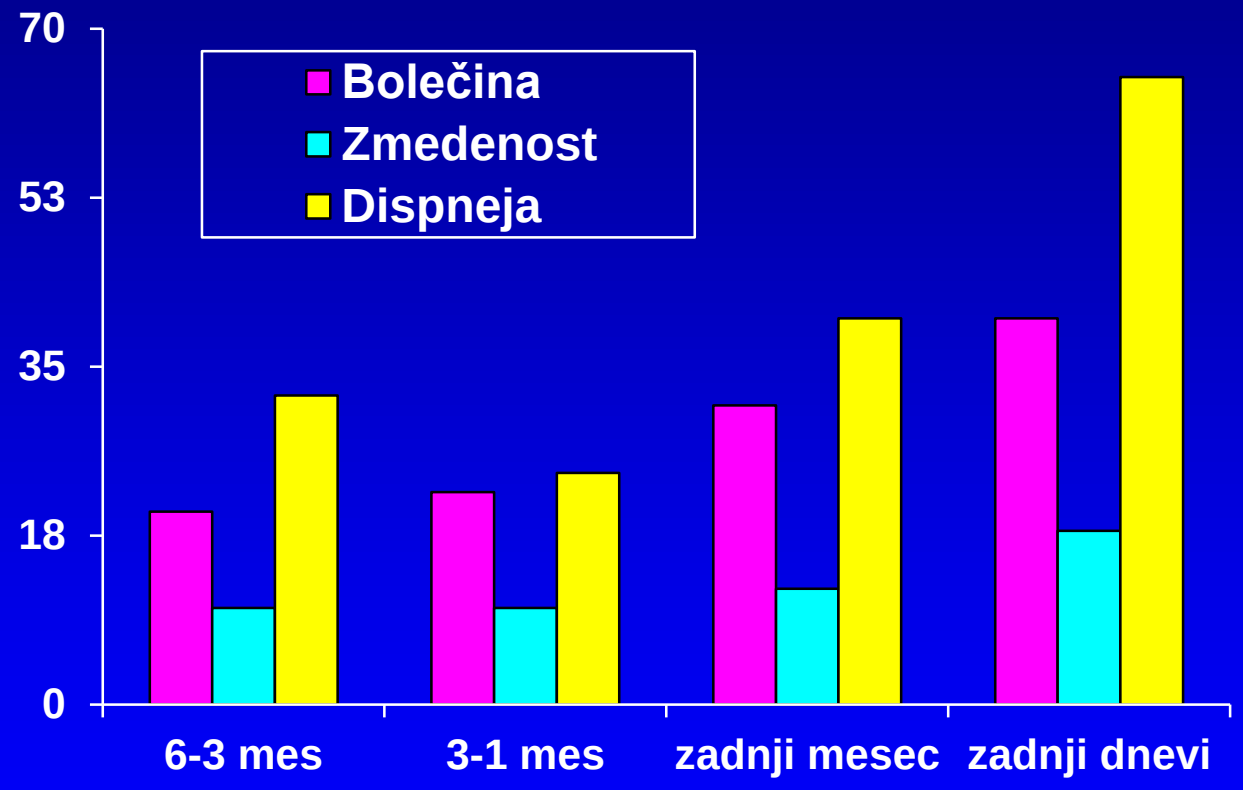


Lainščak M et al, 2011.

Primer #4: Kaj bolnik pričakuje?

- **1996 (66 let)**: MI, CABG
- **2000 (70 let):** reMI, vnovični CABG, rehabilitacija, Koronarni klub
- **2000-2008:** relativno stabilen
- **2008 (78 let) :** angina pectoris, koronarografija: zapora venskih presadkov, nezmožnost perkutanih posegov ali kirurške revaskularizacije
- **2008-2011:** rehabilitacija in optimalno zdravljenje (blokator beta, nitrat, trimetazidin, ranolazin): izboljšanje zmogljivosti, manj napadov angine pectoris
- **2012 (82 let):** vnovično poslabšanje in koronarografija: stanje nespremenjeno
- **2015 (85 let):** hospitaliziran zaradi angine pectoris in srčnega popuščanja
  - zaradi asimptomatske hipotenzije ukinjen zaviralec ACE
  - po ukinitvi več napadov angine pectoris, ponovna oprezna ambulantna uvedba zaviralca ACE (perindopril 2 mg->4 mg->2 mg) in zvečan odmerek blokatorja beta
- **2016 (86 let):** hospitaliziran zaradi srčnega popuščanja, na novo odkrita pljučna fibroza
  - znova ukinjen zaviralec ACE, predvidena (nerealizirana) obravnava pri pulmologu
  - znova uveden zaviralec ACE, napotitev k pulmologu (kandidat za TZKD)
- **“Najprej sem čakal 80. rojstni dan, potem 85. rojstni dan, sedaj čakam sinov 65. rojstni dan”**

5) Praksa: Zadnjih šest mesecev življenja bolnikov s srčnim popuščanjem



Svojci 600 bolnikov s srčnim popuščanjem, ki so umrli v bolnišnici

78 % jih je bilo deležnih aktivnega zdravljenja

24 % jih je menilo, da je aktivno zdravljenje olajšalo simptome

Simptomi = z boleznijo povezana kakovost življenja

• Utrujenost	74%
• Dispneja	70%
• Bolečina	54%
• Zastojni znaki	48%
• Motnje spanja	46%
• Depresija in anksioznost	39%
• Inapetenca	34%
• Kaheksija	22%

Simptomi = z boleznijo povezana kakovost življenja

- Utrujenost
- **Dispneja**
- Bolečina
- **Zastojni znaki**
- Motnje spanja
- Depresija in anksioznost
- Inapetenca
- Kaheksija

- **DIURETIKI**
  - Omejitev tekočin/soli
  - Večamo odmerek
  - Razdelimo odmerek
  - Intravensko
- **NITRATI**
- **OPIOIDI***
- **INOTROPI**
- **KISIK**
- omejitev vode in soli?
- počitek (z dvignjenimi nogami)

*Williams SG et al. Heart 2003.

Simptomi = z boleznijo povezana kakovost življenja

- Utrujenost
- Dispneja
- **Bolečina**
- Zastojni znaki
- Motnje spanja
- Depresija in anksioznost
- Inapetenca
- Kaheksija

Angina pectoris 40-77% (metaanaliza 2006)
Ustrezna obravnava 90% (Gibbons 2002)

- **PROTIANGINOZNA TH:**
  - nitrati
  - blokatorji beta
  - kalcijevi antagonisti
  - ivabradin
  - ranolazin
  - trimetazidin
- **ANALGETIKI/OPIOIDI**
- **REVASKULARIZZACIJA**
- **TENS**

Simptomi = z boleznijo povezana kakovost življenja

- Utrujenost
- Dispneja
- Bolečina
- Zastojni znaki
- **Motnje spanja**
- **Depresija in anksioznost**
- **Inapetenca**
- **Kaheksija**

- **BENZODIAZEPINI**
- **ANTIDEPRESIVI**
- **ANALGETIKI**
- **LAKSATIVI**
- **PROKINETIKI**
- Pogosti, majhni obroki
- Počitek (gibanje, če je možno)
- Pomoč na domu
- Psihosocialna opora
- (psihološki simptomi najbolj izpostavljeni s strani pacienta/skrbnika)

Simptomi = z boleznijo povezana kakovost življenja

- **Utrujenost**
- **Dispneja**
- **Bolečina**
- **Zastojni znaki**
- **Motnje spanja**
- **Depresija in anksioznost**
- **Inapetenca**
- **Kaheksija**

VEDNO PREVERI!

- **Je morda simptom posledica neželenega učinka zaradi zdravil/interakcij?**

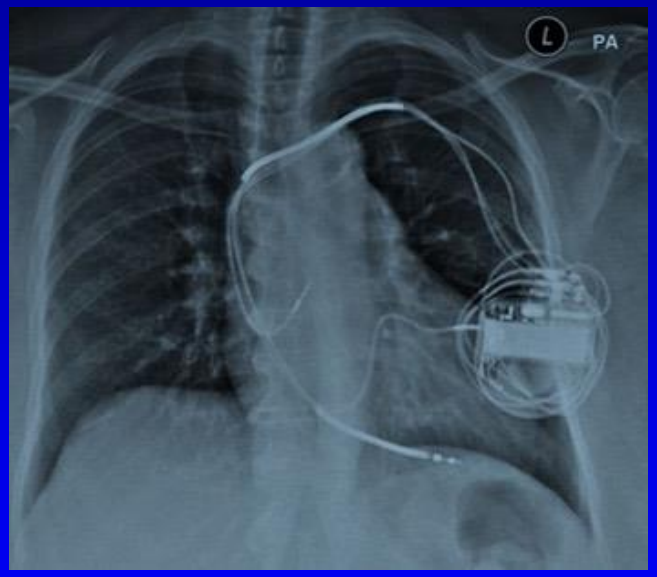
(zlasti utrujenost, hipotenzija, omotičnost, zmedenost, inapetenca)

CELOSTNI PRISTOP?

- **Odpoved posamezne specialnosti/discipline**

Primer #5: Ukinjanje zdravljenja?

- **2009 (63 let)**: MI, srčno popuščanje z LVEF 30 %, zapora obeh karotidnih ter 70 % zožitev leve vertebralne arterije, paroksizmi atrijske fibrilacije
- **2011 (65 let):**
  - **CRT-D**
  - **aspirin 100 mg**
  - **varfarin po shemi**
  - **atorvastatin 40 mg**
  - **bisoprolol 5 mg**
  - **ramipril 5 mg**
  - **spironolakton 25 mg**
  - **furosemid 40 mg + pp**



- **2011-2015:** stabilno stanje, NYHA II
- **2016 (70 let):** diagnosticiran metahrnoni karcinom pljuč in sečevoda - neoperabilen
  - **Ukinjanje zdravljenja?**
  - **Reprogramacija CRT-D?**

Pomoč na domu

Cochrane Library

Cochrane Database of Systematic Reviews

Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers (Review)

Gomes B, Calanzani N, Curiale V, McCrone P, Higginson IJ

Main results

We identified 23 studies (16 RCTs, 6 of high quality), including 37,561 participants and 4042 family caregivers, largely with advanced cancer but also congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), HIV/AIDS and multiple sclerosis (MS), among other conditions. Meta-analysis showed increased odds of dying at home (odds ratio (OR) 2.21, 95% CI 1.31 to 3.71; Z = 2.98, P value = 0.003; Chi^2 = 20.57, degrees of freedom (df) = 6, P value = 0.002; I^2 = 71%; NNTB 5, 95% CI 3 to 14 (seven trials with 1222 participants, three of high quality)). In addition, narrative synthesis showed evidence of small but statistically significant beneficial effects of home palliative care services compared to usual care on reducing symptom burden for patients (three trials, two of high quality, and one CBA with 2107 participants) and of no effect on caregiver grief (three RCTs, two of high quality, and one CBA with 2113 caregivers). Evidence on cost-effectiveness (six studies) is inconclusive.

Primer #6: Žalovanje - svojcev in zdravstvenega osebja

- **1994 (45 let)**: MI, CABG - huda (družinska) hiperholesterolemija
- **2001 (51 let):** reCABG
- **2008 (58 let):** srčno popuščanje, LVEF 35%, ni več možnosti/smiselnosti revaskularizacije
- **2009 (59 let):** sprejem za oceno Tx, hospitalni zdravniki in bolnik sam se zanjo ne odloči
- **2010 (60 let):** vstavitev dvoprekatnega spodbujevalnika
- **2011 (61 let):** 3x na IPP zaradi dekompenzacije, med ambulantnim pregledom ga sprejmemo za reevaluacijo Tx, hospitalni zdravniki in bolnik sam se zanjo ne odločijo
- **2012 (63 let):** pljučnica (doma zdravljena), znaki srčnega popuščanja, predlagamo sprejem, bolnik zaenkrat ne bi Tx
- **2013 (64 let):** posalbšanje srčnega popuščanja, hospitalizacija za rekompenzacijo (levosimendan) in oceno o Tx
  - hospitalni zdravnik po pogovorom z bolnikom meni, da ni za Tx
  - kot ambulantni zdravnik vztrajam, da se v bolnišnici odločijo za Tx ali paliativo; odločijo se za Tx
  - zaradi pljučnice intubiran
  - asistolija, reanimacija, po kateri se smiselno ovede
  - vnovična vztrajna VT/VF - 47-minutna reanimacija (kolegi KOIIM me kličejo in vprašajo, ali je smiselno vztrajati; moj odgovor je bi “Da”)
  - vzpostavljena heminamsko učinkovita srčna akcija, 24 ur kasneje zaradi nereverzibilnega kardiogenega šoka in multiogranske odpovedi umre

Primer #6: Žalovanje - svojcev in zdravstvenega osebja

- **2014:** interniska iz bolnikovega mesta mi ob strokovnem srečanju pove, da je žena zelo očitujoča do zdravstvene oskrbe, češ da bi morali bolniku presaditi srce prej, ko je bil čas za to.
- Prosim jo, da organizira pogovor z ženo in hčerko bolnika:
  - povzamem potek od leta 2009 do 2013
  - izpostavim napredovalost srčne bolezni, vprašljivost Tx pri starosti >55 let, druge (napredovale) oblike zdravljenja, ki jih je prejel (CRT, levosimendan)
  - povzamem odnos z bolnikom - nikoli se ni pritoževal, bil je zelo zadržan do Tx
  - povem, da si očitam le to, da sem pri zadnji dolgotrajni reanimaciji kolegom svetoval, naj nadaljujejo - hči pove, da je za to hvaležna, ker so se lahko od očeta še ustrezno poslovili
  - **žena pove, da si očita, ker ga ni "prisilila" v presaditev**

Zaključki

- 3 ključni sindromi: ishemija, motnje ritma, srčno popuščanje
- Srčno popuščanje je končni stadij vseh srčnih bolezni - zelo slaba prognoza
- Potek pri posameznem bolniku težko predvidljiv
- Podaljševanje življenja in lajšanje simptomov se prepletata
- Številna zdravila: temeljna zdravila + zdravila za lajšanje simptomov
- Multidisciplinarni pristop
- Organizacijski vidiki?

Hvala.

“It is easier to die of Cancer than Heart or Renal failure”

John Hinton,1963