Υπέρταση και καρδιακή ανεπάρκεια με διατηρημένο κλάσμα εξώθησης

Βασιλική Κατσή

Καρδιολόγος
ΓΝΑ Ιπποκράτειο
64 yo coronary angiogram
pneumonia last year - chest discomfort

BMI = 34  H = 173 cm  W = 102 kg
Glucose = 108 mg/dl
CLEARANCE = 72 mL/min/m² (creatinine = 1.5 mg/dl)
VALSARTAN 160 1x1
AMLODIPINE 5 mg 1x1
ATORVASTATIN 20 mg LDL = 110 mg/dl

OBP = 160/75 mm HG
ECG = SR 84 b/min  S1 S2  No rales
Η αύξηση της κρεατινίνης σε 0,6 mg/προ έναν από τους αρχικούς σταδίους της νεφρικής θαλασσώσης.
89 kgs....102kgs  non compliant

“Huffing and Puffing”
(dyspnea and exercise intolerance)
Low NT-proBNP levels in overweight and obese patients do not rule out a diagnosis of heart failure with preserved ejection fraction

Leo F. Buckley¹, Justin M. Canada²,³, Marco G. Del Buono⁴, Salvatore Carbone²,⁴, Cory R. Trankle⁵, Hayley Billingsley⁶, Dinesh Kadariya⁷, Ross Arena⁸, Benjamin W. Van Tassel⁸ and Antonio Abbate²*
• ΑΝΤΙΚΡΟΥΟΜΕΝΕΣ ΕΝΔΕΙΞΕΙΣ ΓΙΑ ΤΗΝ ΔΙΑΓΝΩΣΤΙΚΗ ΑΚΡΙΒΕΙΑ
• ΑΥΞΗΜΕΝΕΣ ΤΙΜΕΣ ΔΕΝ ΠΡΟΔΙΚΑΖΟΥΝ ΤΗΝ ΑΠΑΝΤΗΣΗ ΣΤΗΝ ΘΕΡΑΠΕΙΑ
• Η ΑΠΑΝΤΗΣΗ ΣΤΗΝ ΘΕΡΑΠΕΙΑ ΙΣΩΣ ΚΑΙ ΝΑ ΕΙΝΑΙ ΜΕΓΑΛΥΤΕΡΗ ΣΕ ΟΣΟΥΣ ΕΙΧΑΝ ΑΡΧΙΚΑ ΧΑΜΗΛΕΣ ΤΙΜΕΣ
Just one more: **Echo**

LVH = 125 g/m\(^2\)  
EF = 53\%

RWT = 0.55

E\(_{lat}\) = 8 cm/sec  
E/E’ = 15

LEFT ATRIUM VI = 41 ml/m\(^2\)

RV = ok

PASP = 35-40 mm Hg

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Table I 1  **Cut-off values for parameters used in the assessment of LV remodelling and diastolic function in patients with hypertension. Based on Lang et al.**\(^{150}\) and Nagueh et al.\(^{160}\)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Abnormal if</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV mass index (g/m(^2))</td>
<td>&gt;95 (women)</td>
</tr>
<tr>
<td></td>
<td>&gt;115 (men)</td>
</tr>
<tr>
<td>Relative wall thickness (RWT)</td>
<td>&gt;0.42</td>
</tr>
<tr>
<td>Diastolic function:</td>
<td></td>
</tr>
<tr>
<td>Septal e’ velocity (cm/sec)</td>
<td>&lt;8</td>
</tr>
<tr>
<td>Lateral e’ velocity (cm/sec)</td>
<td>&lt;10</td>
</tr>
<tr>
<td>LA volume index (mL/m(^2))</td>
<td>≥24</td>
</tr>
<tr>
<td>LV Filling pressures:</td>
<td></td>
</tr>
<tr>
<td>E / e’ (averaged) ratio</td>
<td>≥13</td>
</tr>
</tbody>
</table>

LA = left atrium; LV = left ventricle; RWT = relative wall thickness.
TIME – at least 30 min

• Explain THE COMPLEXITY
• MAKE A CONTRACT
• Diet
• Quitting smoking

• THE GOAL
HFpEF = comorbidities
+ 

- HTN
- DM  OBESITY
- CKD
- AF
- COPD
HF preserved is something more than we know

(Know the difference between DD, DHF and HFpEF)
BP

- Valsartan /HCTZ 320/25 mg 1x1
- Amlodopine 10 mg 1x1
Although overall cardiovascular event rates were lower in the intensive-treated group versus the standard care–treated group ($P<0.001$), the major protective cardiovascular effect was evident primarily for heart failure ($P=0.002$),
• PERINDOPRIL INDAPAMIDE AMOLODIPINE 10/ 2,5 /10 1X1
• CHLORORHALIDONE
• LCZ 696 ?
The SPRINT study: Outcome may be driven by difference in diuretic treatment demasking heart failure and study design may support systolic blood pressure target below 140 mmHg rather than below 120 mmHg

Sverre E. Kjeldsen, Krzysztof Narkiewicz, Thomas Hedner & Giuseppe Mancia
Heart rate?

- In HYPERTENSION absence of evidence
- In HFpEF: EXTRAPOLATION of the beneficial effect of HFrEF συναγωγή βάσει προέκτασης
- Chronotropic incompetence
- VENTRICULOARTERIAL COUPLING
Rhythm control

LVH = structural disease

Amiodarone

From HFpEF to HFEF mid range
Risk of stroke (and subclinical microstrokes)
Noac

Compliant?

COST

Dr Google
Central Sleep apnoea
18-30% HFpEF

30-50% HFrEF

Insidious  Chronious
UNRECOGNIZED

New therapeutic options
Bekfani T et all  Europace 2016

No longer can the surrogate endpoints of improvement in respiratory –sleep metrics be taken as adequate therapeutic outcome measures in pts with SLEEP APNOEA+ HF
EXERCISE endurance high frequency

- moderate intensity 40-60% HRR
- At least 30 min/day 5 days/week
- Dynamic resistance exercise training at moderate intensity (50-70% 1RM, 8-10 exercises for large muscle groups, with gradual build up to 2-3 sets per exercise), can be added twice weekly (on non-consecutive days) as dynamic resistance exercise training may lower BP by itself.
THANK YOU