

Heart failure conference Palermo Oct 2011

Per Anton Sirnes
Moss, Norway
CHAIR, COUNCIL OF
CARDIOLOGY PRACTICE



HF PREVALENCE

- About 2-3% overall,
- 70% of those symptomatic,
- In pts over 70 years prev. about 10% HF
- HFPEF & HFREF about equal



Awareness of Heart Failure

- Low among general public
- Too low also among GPs
 - Campaign among GPs:
 - Look for HF (require pro BNP / or echo)
 - Previous MI
 - Dyspnoea on exertion
 - Males with oedema
 - Left Bundle Branch Block



Who makes the diagnosis of HF?

- Acute HF - local hospital
- Patients with symptoms of HF go to their local GP, who refer to out-patient clinic at hospital or cardiologist in practice for an echo.
- GP to start treatment when obvious cause (prior MI), clearly increase BNP
- Many GPs start only with diuretics and not with the full package: BB and ACE



Under-diagnosed HF by patients and general practitioners:

- Many get the diagnosis of “asthma” when the problem is the heart and not the lungs
- Many with unspecific symptoms like tiredness
- Exertion dyspnoea will only surface when you do some exercise!

Awareness of heart failure

- Generally low
- The consequence of severe HF is far worse than most cancers, but HF receives far less attention in the society



Aetiology of HF

- 40 % ischemic heart disease
 - Old MI
 - Advanced multi-vessel disease diffuse
- 20% hypertensive HF (often HFPEF initially)
- 15% cardiomyopathies
- 10% valve disease
- 10% diabetic cardiomyopathy



Diagnostic approach by the GP

- Time to talk with the patients (thorough history)
- Exam: often mislead by oedema (venous insuff) and pulmonary crackles (fibrosis etc.)
- Jugular vein distention
- ECG- seldom completely normal !
 - Old MI?
 - T-wave inversion? LVH pattern?
 - Broadened QRS? Esp LBBBB
- Chest X ray
- Blood sample: Haematology, electrolytes, glucose, creatinin, proBNP

Diagnostic techniques by GP

- History
- ECG
- proBNP
- Chest X ray

Diagnostic techniques cardiologist

- ECG
 - Standard
 - Holter
- ECCO
- CPX
- Pro BNP
- MRI



Diagnostic approach by the cardiologist

- ECHO
 - LVEF biplane /triplane, or best 3D
 - Not eyeballing
 - Always give out volumes
 - Indexed LVEDV and LVESV
- Global 2-strain !!
 - Easily obtained in most patients
- Mitral plane movement (MAPSE)
- Left atrial volume index (LAVI)

Echo/doppler

- E/é > 15? septal and lateral
- MV filling pattern - restrictive pattern (A >> E) that is not reversed by Valsalva manoeuvre: special bad prognostic sign
- TR velocity (thorough search in different positions)
- IVC diameter and respiratory variation

Exercise testing

- Often a forgotten examination
- Important info regarding capacity (METS) and BP and HR response
- Best with gas exchange analysis (CPX)
 - VO₂ max the best prognostic indicator
 - Weber classification of HF
 - VO₂@AT important
 - VE/VCO₂ slope very important > 40 ?? Very bad prognosis
 - Periodic oscillations of O₂ curve
- CPX to measure change after Rx