Heart failure conference
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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