Which of the following are true?

A. Women with ischaemic heart disease have a better prognosis than men
B. Exercise testing is not useful in women with chest pain
C. Non-obstructive coronary artery disease is associated with a poor prognosis in women
D. I am desperate for lunch!
Ms. JD, aged 62

- Previously well
- History of atypical chest pain with normal exercise tests 2005 and 2006
- Background
  - Recurrent UTI’s
  - Hyperlipidaemia (TC 10.2, Trig 2.3, HDL 1.71, LDL 7.4, ratio 6.0)
  - Hysterectomy for cervical cancer
  - Family history premature CVD (father MI in 40’s)
  - Normotensive, no diabetes, current smoker (5/day)
Ms. JD, aged 62

• Sept 2013
  – Sudden onset of central chest burning, radiated to the back, associated with ‘unwellness’
  – Ambulance called and transported to hospital, on arrival collapsed and given precordial thump, recovered
  – Ongoing pain
  – Few weeks history of intermittent exertional chest discomfort
Ms. JD, aged 62

- ST elevation MI
  - Primary PCI to circumflex
  - Staged PCI to LAD during that admission
  - Echocardiogram
    - Mild regional LV systolic dysfunction (circumflex territory), EF 45%, no valvular abnormalities, unremarkable right heart

- Discharged home 4 days later

- Secondary prevention
  - Ticagrelor, aspirin, cilazapril, metoprolol, atorvastatin
Timeline Sept 2013-Jul 2014

21 Jul 14
Admission, sharp chest pain, positional, pleuritic, troponins normal, reassured and discharged

21 Jul 14 MSK
21 Jul 14 outpatient stress echo arranged

21 Jul 14 stopped ticagrelor

3 Apr 14 (abdo pain NOS)

7 Apr 14 Symptomatic ectopy

10 Apr 14 MSK

16 Apr 14 nabothian cysts

11 Jul 14 ED admission, sharp chest pain, dissection and MI ruled out, MSK

21 Jul 14 symptomatic ectopy

27 Jul 14 ED admission, recurrent burning chest pain + fatigue on exertion, trops 180, NSTEMI, angio unchanged

11 Jul 14 ED admission, sharp chest pain, dissection and MI ruled out, MSK

21 Jul 14 symptomatic ectopy
Women and IHD

• Cardiovascular disease is the leading cause of death in women (more than cancer, COPD, Alzheimer’s and accidents combined)
• Similar to men, CVD death rates declined by 60% between 1980→2007, since then rates have increased in women aged 35-54
• Awareness of CVD as the leading cause of death in women has improved
• CVD risk factors (diabetes, obesity) have increased in women
• Generally women present 7-10 years later than men
Women and IHD

• Multiple studies have described under treatment and under testing of women with IHD
  – Higher case fatality rates
  – Increased morbid complications

• Much of the data on which our treatment of IHD is based stems from studies enrolling few women

• Regulatory moves in the US to include women proportionally in clinic trials
Patterns of symptom presentation

• Chest pain/discomfort the most common presenting symptom
  – More often due to mental/emotional stress, less frequently due to physical exertion
  – Significant overlap in qualitative description of symptoms
    • Epigastric discomfort, nausea, radiation to arms/neck/back, dyspnoea and fatigue
    • May have a broad range of symptoms with rest and stress discomfort (nonspecific presentation)
Unfortunate truths

• Strategies of revascularisation with optimal medical therapy or OMT alone is effective at reducing the burden of stable IHD in women and men
• Non obstructive coronary disease is more common in at risk women than men
• Women with stable ischemic symptoms have an increased hazard, particularly in woman older than 75
• Greater mortality from myocardial ischaemic in symptomatic women compared to men
Gender differences

• Different risk factor profiles
  – Smoking, hypertension, lower cholesterol pre menopause, similar cholesterol post menopause, obesity, diabetes

• Risk scoring
  – Much of the female population classified as low or intermediate risk (even up to age 80)

• Psychosocial risk factors may be more common in women and increase risk
Contemporary View

- Documentation of ischaemia and the burden of non-obstructive disease fundamental to determining IHD risk and guiding therapeutic decisions
- Women with non obstructive coronary disease and stress test abnormalities are considered abnormal (not false positive stress test), and at increased IHD risk
What to do with the symptomatic patient

- Consider the pretest probability of IHD
  - Low risk
    - Premenopausal without diabetes
  - Low to intermediate risk
    - 5th decade and functionally unlimited
  - Intermediate risk
    - 50’s and limited
    - 60’s
  - High risk
    - ≥70
    - High risk equivalents
Diagnostic Evaluation

- **Low Risk**
  - Selective Stress Testing
    - Normal ECG and able to exercise
      - ETT
    - Abnormal ECG or not able to exercise
      - Stress Echo

- **Intermediate Risk**
  - Stress Testing

- **High Risk**
  - Stress Testing
    - ETT, Stress Echo or CTCA
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