



National Prescribing Service Limited



Case study 52: Optimising chronic heart failure therapy

(for GPs, pharmacists, nurses and other health professionals)

NPS case studies are designed to help you refine your clinical decision-making skills. After you complete and submit the case study, you will receive expert commentaries along with aggregated responses that provide a snapshot of your colleagues' responses.

Scenario

Harry is a 75-year-old retired naval officer diagnosed with systolic heart failure by echocardiogram 10 months ago. He presents with increased breathlessness on ordinary physical activity (mild chronic heart failure, NYHA II grading of symptoms).

He has a history of hypertension (18 years), stable ischaemic heart disease (10 years), gout (5 years) and depression (6 months) following the recent death of his wife. He has no other significant medical history. His body mass index is 23 kg/m².

His current medications (all once daily) are enalapril 10 mg, frusemide 80 mg, aspirin 100 mg, simvastatin 40 mg, isosorbide mononitrate 120 mg, allopurinol 100 mg, fluoxetine 20 mg and glyceryl trinitrate spray when required.

Harry was an active sailor, before being diagnosed with heart failure he could sail for two hours without symptoms but now he gets breathless after a short while. Before his symptom of breathlessness appeared, he did not have any other physical activity except sailing every two weeks. Harry drinks about 1 litre of water daily and tries to reduce his salt intake but finds this difficult.

The echocardiogram revealed a left ventricular ejection fraction of 30% and no valvular abnormalities. Serum biochemistry (urea, creatinine, electrolytes) two weeks ago were normal. On examination, his pulse rate is 79 and regular, blood pressure is 140/85 mmHg. His jugular venous pulse is not raised and there is no peripheral oedema. His weight is 68 kg, unchanged from his visit 3 weeks ago.

How to participate

All participants: Complete ALL questions, fill in appropriate details and sign the consent agreement in the 'Your details' box (see over).

GPs: To be included in the **Quality Prescribing Initiative** of the **Practice Incentives Program (PIP)**, quote your **provider and prescriber numbers** in the spaces provided.

Pharmacists: This activity is recognised for continuing professional development by the Pharmaceutical Society of Australia (PSA), the Society of Hospital Pharmacists of Australia (SHPA) and the Australian Association of Consultant Pharmacy (AACP). PSA members, quote your membership number in the space provided. SHPA and AACP members, please self-record this activity. For details on recording participation, see <http://casestudy.nps.org.au>

Send to NPS by:
30 May 2008

Send to: NPS
PO Box 1147
Strawberry Hills NSW 2012
Or fax to: (02) 9211 7579

Complete and submit your case study
online at: <http://casestudy.nps.org.au>

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NPS office use only

Read the scenario overleaf and complete ALL the questions.

- a) Given Harry's current condition, what target dose should be recommended for enalapril (currently 10 mg daily for past 8 years), and why?
 Target dose _____ mg Frequency _____
 Why? _____

b) How should enalapril be titrated to reach target dose?
 What dose increment? _____ mg How often (e.g. weekly)? _____

c) What should be monitored during ACE inhibitor titration?

- a) What are the potential benefits and harms of beta-blocker therapy in chronic heart failure?
 Potential benefits _____ Potential harms _____

b) In chronic heart failure, what should be monitored during beta blocker initiation?

c) What advice should be given to a patient on initiation or continuation of beta-blocker therapy for chronic heart failure (e.g. what to expect)?

- a) Is a beta blocker recommended for Harry? Yes No
 Why/why not? _____

b) If **yes**, please list which beta blocker and dosage.
 Drug _____ Starting dose & frequency _____ Target dose & frequency _____

c) How should the beta blocker be titrated to reach target dose?
 What dose increment? _____ mg How often (e.g. weekly)? _____

4. To help Harry with self management of his heart failure, please answer the following questions:

- Which symptoms and signs would suggest his condition is worsening?

- If he develops such symptoms or signs, what should he do?

- What over-the-counter/complementary medicine(s) should be avoided? List 3 examples.

Your details

Please tick one GP Pharmacist Other health professional
 GP registrar Pre-registration pharmacist Student – medical
 Other medical specialist Registered nurse (RN Div 1) Student – other
 Enrolled nurse (RN Div 2)

Title

Family name

Given name

Postal address

Suburb/town

State

Phone number

GPs

Provider no.

Prescriber no.

Pharmacists (PSA members only)

Membership no.

(SHPA and AACP members, please self-report)

Important:

Required for you to be included in the Quality Prescribing Initiative, or receive 1 PSA credit point.

All participants must sign: I consent to these data being recorded (as applicable) for the purposes of PIP, PSA credit points and NPS evaluation.

Participant's signature

Date: / /
 day month year