CHECKING-UP ON THE NATIONAL AUDIT ON HEART FAILURE: ARE ONLY A MINORITY OF PATIENTS ADMITTED WITH HEART FAILURE TRULY BREATHLESS AT REST AND HOW MANY ARE SUITABLE FOR SERELAXIN?

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doi:10.1136/heartjnl-2013-304019.17

Background The National Audit of Heart Failure suggests that most patients with a primary diagnosis of heart failure on discharge present for admission with breathlessness on slight exertion but not at rest. This seems surprising and requires verification. Also, a recent study has suggested that patients, regardless of left ventricular ejection fraction but with elevated natriuretic peptides, which have a systolic blood pressure >125 mm Hg and breathlessness at rest or slight exertion might gain a survival advantage from early use of serelaxin.

Methods We conducted a retrospective case-note review to identify the symptoms at presentation of patients with a primary discharge diagnosis of heart failure and to ascertain what their admission blood pressure was. Blood pressure was taken within 1 h of admission. Results are quoted as median and IQR is reported.

Results Of the first 100 patients enrolled, 25% were women and the mean age was 75±12 years. Worsening symptoms began 4 days prior to admission (0–20 days); 39% had severe breathlessness at rest, 54% were comfortable at rest but breathless on slight exertion at the time of admission and 7% were admitted with chest pain and developed acute heart failure after admission. The main identified reasons for exacerbation were ischaemia (43%), including acute coronary syndrome (25%), arrhythmias (29%), infection (15%), anaemia (12%) and drug non-compliance (5%). Troponin was measured in 54% and was >30 ng/l in 46%. Median blood pressure at admission was 134/76 mm Hg (IQR 117.5–150.5/65.5–95.5 mm Hg) and 61.5% had a systolic BP >125 mm Hg. Heart rate overall was 88 (76–113) beats per minute. 41.5% were in sinus rhythm with a median heart rate of 85 (75–105) and 53.8% were in atrial fibrillation with a median heart rate of 89 (76–120). Serum sodium was 137 (135–140) mmol/l, serum potassium was 4.3 (3.9–4.7) and serum creatinine was 120 (92–142) mmol/l. During or in the year prior to admission, 97% had an echocardiogram test and 80% showed left ventricular systolic dysfunction. Median NT-Pro BNP was 3127 ng/l (IQR 1379–5187). Their median length of stay was 14 days (IQR 9.5–18). In-patient mortality was 12%.

Conclusions This focussed case-note review confirms the data from the National Audit and supports the observation that most patients admitted with a primary diagnosis of heart failure are not in acute symptomatic distress. Changes to service provision, including day-case hospitalisation for investigation and greater home support could have a large impact on hospitalisation rates. Most patients present with a systolic BP >125 mm Hg and might be suitable for treatment with serelaxin.