An Overview of the Management of Congestive Heart Failure in Malta

Stuart Schembri, David Sammut, Nicola Camilleri

Abstract

Background: In July 2003 the National Institute of Clinical Excellence (NICE) issued guidelines on the management of congestive heart failure. We set out to assess the management of congestive heart failure in St. Luke's Hospital (SLH), Malta.

Methods: The files of patients admitted to SLH during the month of January 2002 were retrieved. Eligible patients were those with a history of congestive heart failure. Patients who had passed away by the time of the audit or whose files were untraceable were excluded from the audit. Data from the file pertaining to that specific admission was entered in a pre-prepared data sheet. This includes demographic data about the patient, investigations performed to reach diagnosis and assess severity, pharmacological and non-pharmacological management of heart failure, and planned follow-up at time of discharge.

Results: The management of 97 patients was assessed. All patients with a clinical diagnosis of congestive heart failure had an electrocardiogram, chest X-ray, urea, electrolytes and creatinine estimation and a full blood count. Regarding the other tests recommended by NICE, echocardiography was performed in 28% of patients, serum glucose was assayed in 87%, liver function tests in 36%, thyroid function tests in 24%, urinalysis in 13%, lipids in 8% and spirometry in none. Two per cent of patients had lifestyle modification advice documented in the file. Pharmacological treatment consisted of diuretics (98%), ACE inhibitors (71%), angiotensin II receptor blockers (4%), ß-blockers (9%), spironolactone (12%) and digoxin (25%).

Conclusions: There is still scope for improvement in the management of congestive heart failure locally.

Keywords

Congestive heart failure, management audit.

Stuart Schembri MD, MRCP
Department of Medicine St. Luke's Hospital
Gwardamangia MSD 07-Malta
Email: stuart@keyworld.net

David Sammut MD, MRCP
Department of Medicine St. Luke's Hospital
Gwardamangia MSD 07-Malta
Email: dsammut@waldonet.net.mt

Nicola Camilleri MD
Department of Medicine St. Luke's Hospital
Gwardamangia MSD 07-Malta
Email: nicky_camilleri@waldonet.net.mt

Introduction

Chronic heart failure is known to be a major public health problem in industrialised countries with ageing populations. Its prognosis has been equated with that of the more common malignancies. The management of heart failure requires frequent, prolonged, and costly admissions to hospital.[1,2]

Despite this, studies have repeatedly shown that heart failure is generally not managed optimally.[3,4] Effective therapies are underprescribed and patients are often non-compliant.[3,4] Lifestyle modifications such as exercise training and rehabilitation, advice on smoking and alcohol consumption or vaccination against influenza and pneumococcal disease are often ignored.[3,4] Should medical care improve, many hospital admissions would prove avoidable.[3-5]

In July 2003 the National Institute of Clinical Excellence (NICE) issued guidelines[6] on the management of congestive heart failure. NICE is an independent organisation within the NHS responsible for providing national guidance on treatment and care in the UK. We set out to assess the management of congestive heart failure in St. Luke's Hospital (SLH), Malta using the NICE guidelines as the standard for ideal quality of care in order to identify areas of potential improvement.

NICE guidelines

The key recommendations from the NICE guidelines are summarized in this section.

Diagnosis

- The basis for the historical diagnoses of heart failure should be reviewed according to the algorithm outlined in Figure 1.
- Doppler 2D echocardiographic examination should be performed to exclude significant valvular heart disease, assess the systolic (and diastolic) function of the (left) ventricle and detect intracardiac shunts.

Treatment (Figure 2)

- Lifestyle modification should be enforced in all patients. This should address exercise promotion, smoking cessation, modification of alcohol intake and vaccination.
- All patients with heart failure due to left ventricular systolic dysfunction should be considered for treatment with an ACE inhibitor.
- Beta blockers licensed for use in heart failure should be initiated in patients with heart failure due to left ventricular systolic dysfunction after diuretic and ACE