

FOCUS ON RESEARCH

TO DETERMINE THE LONG TERM OUTCOME OF PATIENTS REFERRED TO A CHEST PAIN CLINIC IN A DISTRICT GENERAL HOSPITAL.

Researchers

Dr A Bridges, Dr C Murphy, Dr S Glen, Dr J Spratt, Dr Tony Stanton

Aim

To determine the long-term outcome of patients referred to a Chest Pain Clinic (CPC) in a District General Hospital (DGH).

Project Outline/Methodology

Chest Pain Clinics (CPC's) are being promoted and are being implemented to allow rapid diagnosis for patients presenting to their GPs with chest pain. Long-term outcome data however is sparse and has previously been derived from Chest Pain Clinics in teaching hospitals.

Patients attending the CPC in Forth Valley were categorised into 6 groups depending on their clinical features and exercise tolerance test (ETT) results. An exercise tolerance test investigation is used to evaluate the possible diagnosis of coronary artery disease in patients with chest pain. Patients are asked to walk on a treadmill. The speed and the incline of the treadmill increases with time and to standardise testing it follows a protocol called the Bruce Protocol. The Exercise Tolerance Test shows evidence of ischaemia (angina) at the time this is seen on the ECG's recorded and reflects long-term outcome.

The 6 groups were:

- * Negative ETT and no symptoms
- * Positive ETT and/or angina symptoms at greater than 6 minutes of the Bruce Protocol
- * Positive ETT and/or symptoms at less than 6 minutes.
- * Patients admitted to Hospital
- * Inconclusive ETT
- * Patient had other diagnosis after assessment at the CPC.

The CPC was staffed by trained GPs, patients were categorised into one of the above groups and linkage analysis performed by the Information Services Division to give long-term outcome data.

Key Results

4669 patients were referred over a 5-year period, the majority of patients (60% of total referrals) had a

negative ETT and their mortality rate was 1.0% and MI rate was 0.7% over 882 days.

High risk groups were identified - those patients requiring hospital admission (mortality rate 8.3%), those with inconclusive ETTs (mortality rate 2.4%) and those unsuitable for an ETT (mortality rate 5.5%)

Conclusions

This study details the longest period of follow up data for CPC attendees, the largest cohort of patients followed up and used a model applicable to DGHs with GPs running the service. Patients could be accurately risk stratified following attendance at the CPC.

What does this study add to the field?

A model using trained GPs to undertake assessment at CPCs has not previously been described. This model is widely applicable. The data provides a more detailed information base than previously described and other future CPC's can use this data as a comparator to their own

Implications for Practice or Policy

CPCs are being advocated by the Scottish Executive as a model for rapidly assessing patients, this study supports the CPC Models and provides longer-term outcome data than have previously been available. The data does allow current or future CPCs to compare their outcome data and this may result in a further change in the model of CPC delivery.

Where to next?

It is likely that some Chest Pain Clinic models will become Nurse Led and it would be important for quality assurance that long-term follow up data from these clinics is compared to current data.

Further details from:

Dr Allan Bridges
Consultant Cardiologist
Forth Valley Acute Operating Division
Livilands, Stirling, FK8 2AU

