A qualitative interview study of patients with cardiac disease and continuing chest pain

Brian Tiplady[1,2], Katarina Halling[2], David Secker [2], Elisabeth Bolling-Sternevald[3], Ashok Jacob[4], Frances Divers[4]

[1]University of Edinburgh, UK; [2]PRO Consulting, a division of invivodata inc., Pittsburgh, PA, USA; [3]AstraZeneca, Mölndal, Sweden, [4]St Johns Hospital, Livingston, UK

Chest Pain

Chest pain is a key symptom in heart disease. Acute chest pain may announce the onset of a heart attack, which could be fatal. Thus even when the pain is not particularly severe, it can cause alarm and anxiety.

Chest Pain and Uncertainty

Cardiac problems are not the only source of chest pain. Gastrointestinal and musculo-skeletal problems and anxiety states are the other main causes of chest pain .

Cardiac and non-cardiac sources of chest pain can co-exist. A patient with heart disease may also have a gastrointestinal or other disorder that causes chest pain. Since both cardiac and non-cardiac chest pain are common, the combination is also likely to occur in a substantial number of patients.

Having both cardiac and non-cardiac chest pain presents increased problems for patients. Continuing chest pain in spite of treatment for cardiac problems may lead to increased uncertainty and anxiety. Patients may feel less in control of the situation, may be more likely to adopt maladaptive coping strategies such as avoidance of exercise, and may be less able to distinguish situations where medical help is required [1].

The Interview Study

We interviewed thirteen patients (8 male, 5 female) aged 52-63 years, with a diagnosis of coronary artery disease (CAD) who continued to have chest pain. Interviews explored three broad domains:

1) Illness: the condition and its treatment as experienced by the patient
2) Ideation: responses in psychological terms (attribution and affective response)
3) Behaviour: coping strategies, activity limitations, use of health resources

Descriptive analysis of interview transcripts began with identification of keywords, which were then organised into groups. Each keyword group was allocated to one of the three domains.

The transcript was divided into short sections, or "clips", which were then organised by keyword group, and themes identified and summarised within each keyword group. Themes were than mapped onto a series of questions identified during the study planning stage.

Contact Details:

btiplady@patientreported.com
Website: www.patientreported.com

Domains

1. Illness: characteristics of the patient group

- Pain was very variable in frequency, with a median of two episodes per week. Pain was triggered by:
  - Exercise: 6 patients
  - Bending or stretching: 2 patients
  - Stress or noise: 1 patient
  - Cold: 3 patients
- Intensity varied from "just a wee twinge" to "like somebody smacking you in the chest with a length of 2X2"

2. Recurring themes in affect and interpretation

- Thinking it might be indigestion at the time, but later realising that it was cardiac pain
- Being told you haven't had a heart attack but not being told what it was
- The importance of information
- Anxiety, worry and fear
  - Thoughts of death and dying
  - Worrying about the number of medicines being taken and their effects
- Some patients found aspects of their condition embarrassing
- Uncertainty about what was wrong with them

3. Recurring themes in behaviour

- Exercise
  - All agreed that exercise was good for patients with a heart condition
  - However some were nervous or cautious about how much to exercise
- Smoking
  - Two patients were current smokers, and four had given up, mostly on medical advice.
- Visits to doctors, clinics:
  - Patients as expected had fairly frequent consultations.
  - Two patients reported emergency visits. One of those patients had been put off going to emergency by the thought that she might be wasting people's time.
- Limitation to everyday activities was often considerable

Discussion

These patients have substantial levels of pain, anxiety and limitations to activities. From the interviews, it appeared that most patients did not expect significant improvement to their condition.

It is clear that there is a considerable amount of uncertainty around this issue. A number of patients reported investigations which ruled out angina or other cardiac cause for their pain, but gave no indication of the cause. This led to considerable frustration, and the uncertainty appeared to contribute to the limitations in these patients' lives. Identification of the cause of pain, and effective treatment could lead to great benefits [2].

References

1. Leise, M. D. et al. (2010) Mayo Clinic Proceedings, 85: 323
2. Achem, S. R. et al. (1997) Digestive Diseases and Sciences, 42: 2138

Questions

Can patients tell the difference between cardiac and non-cardiac pain?

Patients generally thought that the experience of cardiac pain was distinctive. However it is clear from patients' descriptions that there is considerable uncertainty about this issue. Several patients initially attributed acute cardiac pain to indigestion.

"[I] thought it was really indigestion at that time, the pain was excruciating. I waited until Tuesday and didn't feel any better and went to the doctor"

Do patients with continuing pain have more "false alarm" visits to clinics and emergency facilities?

False alarms visits clearly occur, and can be embarrassing for the patients in many respects. At least one patient had put off visiting the clinic because of fear that she would be wasting people's time.

"I wasn't going to the doctor because I thought am I imagining this? And you know you'll make a fool of yourself."

How anxious are patients with CAD who continue to have chest pain?

There is a good deal of anxiety and worry in these patients.

Patients worry about having another heart attack, about whether their family will be provided for if they die, about whether they will be able to keep their work life going. Patients are also anxious that they may make those around them unnecessarily nervous (e.g., worrying their spouse), cause embarrassment to others, or waste people's time. They also worry about the amount of medicine they are taking, and the effect it may be having on them.

How much does uncertainty about pain origin contribute to this anxiety?

For some patients, the lack of explanation of cause of pain when a cardiac origin had been ruled out was a cause of concern.

"she says there's no sign of angina or anything. I said, Ok then, so what's causing the pain? She says I don't know, but its not angina and that's it, and then you're left hanging, you know, you go back to the GP, well the GP didn't know in the first place, that's why he sent me in here"

How much does chest pain, anxiety and/or uncertainty contribute to limiting these patients in doing the things they want or need to do?

Chest pain and other symptoms cause substantial limitations in patients lives, ranging from reduction or leaving work, to changing daily patterns of activity in light of possibly having angina, to reduction in exercise and other social activities. A number of patients reported either reducing the amount of exercise they take, or of being nervous about exercise because it might trigger a recurrence.

Conclusions

These patients we studied continue to experience a variety of types of pain which have a substantial impact on their lives. There is a great deal of scope for reducing this impact through effective treatment of ongoing pain, and consequent reduction in both the direct and indirect sources of limitation of their lives.