THE RELATIONSHIP BETWEEN PSYCHOLOGICAL FACTORS AND IMPAIRED HEALTH-RELATED QUALITY OF LIFE POST ST-ELEVATION MYOCARDIAL INFARCTION

doi:10.1136/heartjnl-2011-300198.12

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Introduction Evidence suggests that psychological factors, such as depression and anxiety, are independent risk factors for increased morbidity and mortality post STEMI. The aim of the study was to assess the contribution of anxiety and depression to HRQoL in post STEMI patients, after controlling for possible confounding factors, including type of treatment.

Methods We conducted a prospective cohort study of 385 post STEMI patients who had undergone either lysis (183) or PCI (202). The mean age was 60.0 years (SD 11.8) and 78% were male. Patients were assessed on a range of demographic, clinical and psychosocial variables, including measures of cardiac risk, cardiac severity and comorbidity (Charlson Comorbidity Index—CCI). Psychosocial assessment included anxiety and depression (Hospital Anxiety and Depression Scale), illness perceptions (brief IPQ), and health-related quality of life (SF-36). The main outcome measure was the SF-36 Physical Component Score (PCS) at 6 months post STEMI.

Results Baseline results revealed a small number significant differences between groups on a range of clinical variables, including higher GRACE scores for PCI group (p=0.007) but no differences in LV function. Lysis patients had more comorbid illness as measured by the CCI (p=0.037). Regarding psychological variables the total HADS score was significantly higher in the PCI vs lysis group at baseline (means 13.2 (SD 7.9) and 11.4 (SD 8.9), p=0.035), while anxiety and depression almost reached significance, with raised anxiety and depression scores in the PCI group. In order to identify variables at baseline that may contribute to SF-36 PCS at 6 months, we conducted a hierarchical multiple regression with four blocks of independent variables—demographic, comorbidity-related, clinical and psychological. Factors which contributed to the final model were cholesterol levels (p=0.051) and depression (p<0.001). Treatment group did not play a role (p=0.199). The addition of anxiety and depression contributed significantly to the reporting of lower physical health-related quality of life (PCS) at 6 months (AR2=0.12, p<0.001).

Conclusion The findings have shown that raised levels of depression and anxiety predicted impairment in health-related quality of life at 6 months post STEMI, regardless of mode of treatment. The results indicate that the assessment of psychological factors is important in both groups. Despite PCI having improved clinical outcomes, there will always be a group of patients receiving lysis. As such it is important to assess anxiety and depression in post STEMI patients, and to include these potentially modifiable factors in the design of suitable interventions for this patient group.
Dynamic changes of oedema and late gadolinium enhancement after acute myocardial infarction and their relationship to functional recovery and salvage index

doi:10.1136/heartjn-2011-300198.14

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Introduction Changes in myocardial tissue in acute ischaemia are dynamic and complex and the characteristics of myocardial tissue on cardiovascular magnetic resonance (CMR) in the acute setting are not fully defined. We investigated changes in oedema and late gadolinium enhancement (LGE) with serial imaging early after acute myocardial infarction (MI).

Methods and Results CMR scans were performed on 30 patients with ST elevation MI (STEMI) treated by primary PCI at each of 4 time points: 12–48 h (TP1); 5–7 days (TP2); 14–17 days (TP3); and 6 months (TP4). All patients showed oedema at TP1. The mean volume of oedema (% LV) was 37±16 at TP1 and 39±17 at TP2.