Depression and Anxiety in the Post Operative Coronary Artery Bypass Graft Patient

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Background: More than 600,000 coronary artery bypass graft (CABG) procedures are performed annually in the United States for relief of angina and improvement in quality of life. Many patients endure anxiety and depression after bypass surgery. Post operative CABG patients who are anxious or depressed are less likely to adhere to medical recommendations such as exercise, proper nutrition and self management practices.

Purpose: At Jersey Shore University Medical Center, no screening tool is currently utilized to screen for post-operative depression and anxiety in the CABG patient. The purpose of this study was to identify depression and anxiety post CABG, and to identify patient characteristics that may be associated with the development of depression and anxiety.

Methodology: The Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) was administered to 15 participants two times. Time 1 (T1) was administered during the hospital stay, post-operatively, Time 2 (T2) was administered via telephone interview 4 weeks post discharge. The HADS consists of 14 statements: 7 related to Anxiety (A) and 7 related to Depression (D). Higher scores represent greater anxiety or depression.

Results: Fifteen subjects participated in all aspects of data collection of the study. The sample was primarily male (60%, n = 9), married (93.3%, n = 14), and living with their spouse (93.3% n = 14). All subjects were white/Caucasian. The majority of the participants (n=11) were retired (73.3%); 20% were employed (n=3). The mean age of the participants was 68, with the youngest person at 57 and the oldest at 83. Male participants were older (mean age 69). The mean anxiety score for T1 was 7.5 (SD 2.72) and for T2 was 4.0 (SD 2.19). Paired samples (Dependent) t-tests comparing T1 and T2 revealed a statistically significant decrease in anxiety (t = 6.72, df = 14, p = .000). The mean score for depression T1 was 2.53 (SD 1.50). and for T2 was 1.4 (SD .98). Paired sample t-tests comparing T1 and T2 revealed a statistically significant decrease in depression (t = 3.37, df = 14, p = .005).

Conclusion: Depression and anxiety were greatest immediately after surgery and decreased significantly at 4 weeks. However, overall scores for both depression and anxiety were low. Small sample size and the challenge of recruiting patients to complete questionnaires about depression and anxiety may have contributed to the low scores.