

Anxiety, Depression and Behavioral Rating Scales in Children with Non-Cardiac Chest Pain

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Objectives: Chest pain is the second most common reason for referral to pediatric cardiologists after benign heart murmurs. Etiology frequently depends on non-cardiac reasons. Non-cardiac etiologies of chest pain can include skeletal-muscle system disorders, gastrointestinal abnormalities and psychological symptoms. In addition, individuals may experience non-cardiac chest pain (NCCP) which is idiopathic, or of unknown origin. The aim of this study is to examine psychological symptoms in children and adolescents with medically unexplained chest pain.

Methods: 76 patients (ages 8–18 years) were included in the study who referred to the pediatric cardiology department with the complaint of chest pain but did not have any detected cardiac etiology or any other organic causes of chest pain. The control group was composed of 51 healthy volunteers in the same age group. Self-evaluation scales were given to both groups which included Beck Anxiety Inventory and Children's Depression Inventory. Also parents of both groups completed the Conner's Parent Rating Scale for assessment of Attention-deficit/hyperactivity disorder.

Results: Anxiety scores of the non-cardiac chest pain group were significantly higher compared to controls. No significant differences were found between patients and controls in terms of attention-deficit/hyperactivity disorder and depression scores. In patient group, patterns were similar for boys and girls and for children and adolescents; except girls scored significantly higher than boys in children's depression inventory.

Conclusions: In children and adolescents, non-cardiac chest pain is associated with increased levels of anxiety. These results show the importance of psychiatric evaluation in non-cardiac chest pain patients. Larger controlled studies are needed to determine the prevalence and impact of attention-deficit/hyperactivity disorder and depression in children and adolescents with NCCP.