High Anxiety and Depression Scores in School-aged Children Defining Syncope Together with Cardiac Symptoms

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Objectives: The aim of this study was to investigate the psychological factors in school-aged pediatric population defining syncope together with palpitation and chest pain.

Methods: Seventy school-aged children defining syncope, palpitation and chest pain were investigated. “The Screen for Child Anxiety Related Emotional Disorders (Birmaher B., J Am Acad Child Adolesc Psychiatry, 1997; 36: 545-53)” and “Beck Depression Inventory (Kovacs M., Psychopharmacol Bull, 1985; 21: 995-8)” scales were applied to patients to determine psychological background. Special features at history (family history, worrying events at near time, negative effect on daily life, duration of complaint), physical findings (heart rate, blood pressure), laboratory findings (hemoglobin, serum glucose and electrolytes, thyroid function), electrocardiography (ECG) (rhythm, QTc duration) and echocardiography (ECHO) findings, 24-hour rhythm Holter monitorization results were also investigated.

Results: The mean age of children was 13.7 ± 2.1 (9 – 17) years. The female/male ratio was 3.7 (55/15). The median anxiety score was 30 (7 – 60) (cut-off point of 25) and depression score was 13 (2 - 33) (cut-off point of 19). The anxiety score was high in 54 patients (77%) and depression score was high in 17 patients (24%). In 15 patients (21%) both scores were high, however in 14 patients (20%) both scores were normal. The mean hemoglobin was 13.2 ± 1.3 (9.2 – 15.8) gr/dl, the mean QTc duration was 383 ± 31 (320 – 491) ms. Other clinical and laboratory findings are listed in Table 1. There were significant correlations between anxiety scores and female sex (r: 0.3, p<0.01), and negative effect on daily life (r= 0.3, p<0.01). There were also significant correlations between depression scores and female sex (r: 0.3, p<0.05), family history (r: 0.3, p<0.05), worrying events at near time (r: 0.2, p<0.05), and negative effect on daily life (r: 0.2, p<0.05). The correlation between anxiety and depression scores was also significant (r: 0.5, p<0.0001).

Conclusions: Psychological factors causing anxiety and depression may result in psychosomatic disorders. It could be more reasonable to direct these patients with high anxiety or depression scores to psychotherapy before making some advanced laboratory studies and prescribing medicines.