Emotional Problems in Adolescents with Congenital Heart Diseases

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Abstract

Chronic diseases of childhood and the associated emotional problems are receiving major attention in the current pediatric practice. Adolescents with congenital heart diseases have significantly higher emotional problems compared to those without chronic illnesses. Early detection and management of emotional problems is essential to improve the quality of life of the adolescents with congenital heart diseases.

Key Words: Emotional problems, Adolescents, Congenital heart diseases

Introduction

Chronic illness will have negative impact on academic performance and intellectual development of children, which will further compromise the emotional wellbeing of the individual. [1] Congenital heart disease (CHD) is a chronic illness with high prevalence worldwide, and is usually diagnosed at birth. Several emotional disturbances are seen in adolescents with congenital heart diseases including marked anxiety, depression and low self - esteem. [2] Adolescent congenital heart disease is increasing in prevalence as better medical care results in more children surviving to adolescence. [3] Advances in overall management have led to an increasing number of adolescents with congenital heart disease reaching adulthood. [4] Special attention should be given to identify the adolescents who are at risk for developing emotional disorders. This will help to provide adequate therapy to prevent further morbidity.

Emotional problems in adolescents with severe congenital heart diseases

In the study on 13 to 18 year old adolescents with severe congenital heart diseases (CHD), Spurkland et al [5], found higher rate of emotional problems in the complex CHD group. The physical incapacity as well as the chronic family difficulties negatively influenced the psychosocial functioning and the emotional well being of the adolescents with CHD. A comprehensive approach is essential in the management of these patients.

Cohen et al [6] assessed the health related quality of life, mood and self-esteem of ninety adolescents
with congenital heart diseases and compared them with healthy adolescents. Adolescents with severe heart disease had worse health related quality of life and had higher levels of depressed mood with low self-esteem. Psychosocial factors influence the emotional wellbeing of the adolescents which should be addressed and managed. [6]

Wang et al [7] evaluated the prevalence of depression and anxiety in 119 adolescents with heart disease and found that 9% had depression and 27% had anxiety. Good social support and feeling of optimism were found to be significant factors which could reduce the emotional problems. Though depression and anxiety were common in this adolescent population with heart disease, none of them were properly assessed or treated.

Depression in adolescents with congenital heart disease, can exacerbate the physical consequences of the illness. [8] Congenital heart disease patients with scholastic backwardness usually have more anxiety and depression.

**Emotional problems in adolescents with operated congenital heart diseases**

Adolescents with operated congenital heart disease are at risk for long term emotional problems. [9] In this study on 125 adolescents aged 10 - 15 years with CHD, the child behaviour checklist (CBCL) was used to identify the behavioural and emotional problems. Several medical variables were analyzed. Patients with greater number of heart operations, deep hypothermic circulatory arrest, short gestational age, low systemic oxygen saturation and older age at surgical repair had more emotional problems. [9]

Utens et al [10] assessed the emotional problems in adolescents; nine years after surgical correction for congenital heart disease in childhood. On the youth self - report, adolescents with congenital heart diseases obtained significantly higher problem scores than same aged peers from normative reference groups.

In the study to determine the psychological morbidity of adolescents operated in childhood for congenital cyanotic heart diseases, Toren P et al [11] found that these adolescents are at risk for long term posttraumatic stress symptoms. Emotional disorders in adolescents cause significant impairment in the routine work, academic performance and social interaction of the individual. [12]

**Management**

Periodic monitoring of adolescents' quality of life by experts in adolescent guidance is essential. This enables early detection of psychosocial issues, including low mood and anxiety. When psychosocial problems are identified, screening for depressive disorders and anxiety disorders is necessary. For known high-risk adolescents (those with previous history of stress in family, eating problems, poor scholastic performance etc.) more frequent monitoring is required. Interventions aimed at enhancing social support will be beneficial for the patient and the family members. Cognitive Behaviour Therapy (CBT) is effective in the management of emotional problems of adolescents. CBT has been researched extensively, and has demonstrated effectiveness in emotional disorders. The application of CBT is an individualized program that will help adolescents to identify the negative thoughts and learn healthier coping skills. Merry SN et al [13] after evaluation of sixteen studies including 3240 participants reported that psychological and educational interventions reduced the risk of having a depressive disorder in adolescents. There is evidence that psychological therapies are effective for treating posttraumatic stress symptoms in adolescents. The therapy with best evidence of effectiveness was cognitive behaviour therapy, for which there was significant improvement for up to one year following treatment. [14]
Conclusion

There is high prevalence of emotional problems in adolescents with congenital heart diseases. Physical limitations have negative impact on the quality of life of these patients. Depression and anxiety are common in adolescent population with heart disease for which early intervention is necessary. Social support can improve the ability to cope with the stress. Better school performance is usually associated with better overall quality of life. Antecedents of emotional disorders should be specifically targeted and evaluated by experts in adolescent guidance. Psychological therapies are effective in the management of emotional problems of adolescents.

References
