Children with Medically Unexplained Pain Symptoms: Categorization and Effective Management

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ABSTRACT

Context: Medically unexplained pain symptoms are common in children, and their incidence is on the rise. There is often a lack of clearly articulated pathophysiology in these patients. There is need to improve understanding about varied causes and presentations of these patients which would generate further insight in management of these patients. Documentation and detailed assessment of such children in Indian setting is not seen in literature. Materials and Methods: A series of 17 cases, 10 boys and 7 girls referred from pediatrics department is discussed, so as to categorize them in three different subgroups for management. Result and Discussion: Although there were often no overt anxiety or depressive features, some psychosocial stress which was mostly unnoticed by the child, the parents and the doctor, preceded such a pain. It was often an academic stress, familial separation or parental psychiatric illness. They were at times not able to verbalize their distress, which was revealed with the help of Children's Apperception Test (C.A.T.). They mainly had anxieties about loss of love or disapproval by parents and also fear of harm or injury. They used defence mechanisms like denial, reaction formation and repression, which were ineffective in handling the overwhelming anxiety. Most of these children had either above average or borderline intelligence. Somatic expression of emotional needs and fears in these children was managed effectively by supportive therapy and antidepressant drugs.

Key words: Children's Apperception Test, intelligence and pain, pain in children

INTRODUCTION

Transient organically unexplained pain symptoms are common in children. They often result from various normative childhood anxieties. The pain often symbolizes the distress experienced by the child. It often resolves spontaneously with or without empirical treatment. However, the pain is persistent and disabling in some children who then warrant clinical assessment. Their assessment and treatment is challenging, since cohesive information is often not available. All possible medical causes have to be ruled out before labeling such pain as functional.

Pain is an unpleasant sensation. Perception of pain occurs at primary somato-sensory cortex and some fibers also reach parts of the brain controlling emotion and motivation, which generates affective component in brain. Pain disorder is often described as “category difficult to diagnose and treat.”

Literature describes temperamental attributes of these children such as being caring, sensitive to needs of others, perfectionist and anxious. They often set high standards for themselves and get discouraged when...
they cannot achieve them.\[4\]

Pain symptoms worsen with their worries about school, friendships and family.

The child has to undergo multiple investigations and parents face many anxieties while the investigations are carried out. Good communication with the parents, the child and an effective liaison with mental health professionals is necessary for successful treatment. Psychiatric morbidity is high in children with unexplained chronic pain and thus needs to be assessed and treated.\[5\]

**MATERIALS AND METHODS**

We studied consecutive cases of medically unexplained pain symptoms as they were referred from pediatrics clinic or wards. The cases included those suffering from pain at one or more sites since more than a month. Children with any possible medical cause for the pain were excluded from the study. One of the parents was also interviewed with the child. Each case was documented in a semi-structured format that included socio-demographic data, duration and description of pain, precipitating stresses, prior history of psychological distress or disorder if any and psychiatric disorder in either of the parents. They were then administered a test of intelligence Colored Progressive matrices (C.P.M.) and Children’s Apperception Test (C.A.T.) by the psychologist.\[6\]

Information obtained from 17 such children was tabulated and analyzed manually.

**RESULTS**

Common and distinguishing characteristics of these children are described in this paper.

These children came from both rural and urban backgrounds. Twelve of them were from urban area. Nine of these were first born and seven of them had comorbid depressive disorder.

Seven of them had low normal and another seven had bright normal to above average intelligence as revealed from their percentile rank scores on C.P.M. test of intelligence, scores on C.P.M. test of intelligence. The basic data of these children is tabulated in Table 1.

Each child fulfilled criteria for persistent somatoform pain disorder as per ICD 10. Seven of them also suffered mild depressive episode.

In this case series, most children were found to be highly sensitive, many were competitive and achievement oriented. The commonly used defense mechanisms as depicted by children’s apperception test were denial, reaction formation, repression and rationalization. Although normal for their age, denial is known to affect coping with stress adversely. Onset of symptoms was often seen following some emotional stress due to school related or familial problems. Threatening ideas, wishes, impulses are known to be kept out of awareness by defenses like isolation and reaction formation.

Following cases are representative of various prototypes of these children.

**Case 1**

A 10-year-old girl, active and intelligent, elder of the two sibs came with her mother. Chief complaints were chest pain and breathlessness since one and half month without any apparent medical cause.

Her mother had high expectations from her and she had good academic achievements. She was punished by teacher for 2-3 days absenteeism though she had obtained prior permission. The pain started after this event, which was perceived as scaring, insulting and unfair, feelings that could not be voiced.

Intellectual assessment using C.P.M. showed that she had bright normal intelligence. On C.A.T., stories suggested fear of disapproval and feeling helplessness. In stressful situations she rationalized with reaction formation and denial, defense mechanisms which are normal for her age.

On psychiatric assessment – She did not have any anxiety or depressive features. She improved with 3-4 sessions of supportive therapy and play therapy without any drug intervention.

Such pain occurring after apparently insignificant stressor may be often labeled as idiopathic if not assessed in details. High emotional sensitivity of the child in this case made her perceive this seemingly normative event as significantly stressful. In a study of chest pain in children 68.8% children had idiopathic chest pain.\[7\]

Parents of such children are reported to have frequent physical complaints and sickliness.\[8\] But this was not common in this group of children. Rather, they commonly had problems in relationship with parents or fears of rejection from them.

**Case 2**

A 12-year-old boy, came with complaints of chest pain, headache and abdominal pain. He was investigated for these complaints and then referred to psychiatry.

He was staying in a hostel since the age of 6, his mother visited him weekly. Father being alcohol dependent,
used to physically abuse mother and child. Expectations about the child from the father were very high, often resulting in punishment. To avoid this, his mother preferred to keep him in the hostel.

Psychological assessment: On intelligence test, his intelligence was at ‘average level’. On C.A.T. he showed fear of injury and helplessness. His stories suggested that he was confused and unable to overcome his conflicts and problems. For difficult situations, he tried to use isolation and reaction formation as defense mechanisms.

On psychiatric assessment, he did have depressive features but the pain periodically worsened with stress. He improved on treatment with Sertraline 50 mg and supportive therapy.

Treatment with antidepressants was needed for children who had depressive disorder along with pain. Pain symptoms in these children were prolonged and they often had a family history suggestive of depression or history of separation from parents.

Case 3
A 10-year-old girl from an extended joint family was looked after mainly by her grandparents. She came with her grandmother and reported a complaint of headache since 3 months. She had two elder brothers and being the only girl child, was pampered and overprotected. Her complaint started when her grandparents moved out of town for work. On psychological tests, her intelligence was at ‘low average level’. On C.A.T. stories indicated fear of harm and avoidance. In all difficult situations, she used the defense of repression.

She did not have any other complaint apart from pain. She improved completely with 5-6 sessions of play therapy when she was allowed to express her emotions in therapeutic setting. Parents were counseled and asked to be supportive.
Children without depressive features improved well with supportive and play therapy alone. Four to six sessions were adequate for symptom remission in most of these children.

Small sample size is a limitation of this study and thus a larger study is being undertaken.

**DISCUSSION**

We can classify these children in three subgroups, which can help in understanding and management of these patients.

Children with limited intellectual, emotional and social resources can be considered as the first group of vulnerable children. They are prone to overwhelming anxieties which are expressed as bodily pain not explainable by any medical cause. They are also prone to anxiety and depressive disorders and may need psychopharmacological treatment for the same. Parents need to be given insight in the capacities of the child.

Second group among these have normal intellectual, social abilities but had to face prolonged separation from parents or stress due to familial discord giving rise to secondary anxiety, mood disturbances and insecurity feelings. Counseling of the parents and also the treatment of their psychiatric ailments helps these children to a great extent.

The third group is of intellectually bright and emotionally highly sensitive children, lacking any obvious stresses and psychopathology, coming from apparently happy families. They show fears of rejection from parents and pressure for performance. They have ability to learn coping with the stress and they understand their fears through play therapy, once a good rapport is established. Supportive therapy and play therapy alone may totally relieve them of their symptoms.

Biopsychosocial interventions for the child and parents thus may have to be tailored as per the case. Each case is unique in this aspect.

Pain and other medically unexplained symptoms in childhood is an important public health problem and we need to understand its determinants so as to delineate specific treatment and also determine prevention strategies.

Patient and especially the family feel stigmatized when a psychiatrist is involved in the treatment and our cases were no exception. However, continued participation of the pediatrician and liaison between the two physicians helped in minimizing the stigma and ensuring compliance.[9]

Close interdisciplinary collaborative relationship is important in ensuring compliance in these patients.

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