Recurrent abdominal pain in childhood

In 1957 Apley and co-authors published their famous epidemiological study of 1000 school children. They reported that 10.8% of the school age population had Recurrent Abdominal Pain (RAP). Similar figures have been reported by subsequent researchers and the same incidence has even been reported in pre-schoolers. This would make RAP one of the most common chronic illnesses of childhood. Yet in only 5% of cases can an organic diagnosis be determined; thus for the majority of these children the cause of their pain remains a mystery and management therefore problematic. (see Table 1)

The absence of a clear aetiology has prompted researchers to theorise about possible causes. In recent times these have included lactose intolerance, constipation and helicobacter pylori infection. While accepting that these conditions may cause abdominal pain there is little reproducible evidence to suggest that they are frequent or a significant cause of RAP in our childhood population.

Researchers have had more success describing how children with RAP differ from their peers. What is generally accepted is Apley’s original observation that children with RAP are ‘timid, nervous, anxious or over conscientious’. Researchers have almost universally reported that children with RAP tend to be more ‘sensitive’ than their peers. Some have theorised that perhaps this ‘sensitivity’ makes these children more vulnerable to experiencing normal physiological functions as painful, or that they over-interpret trivial pains, or even that they somatise their emotional pain in a physical form. It is well to remember that these possible causes of RAP are purely speculative and remain unproved as common or significant precipitators.

Classically, recurrent abdominal pain occurs in otherwise healthy children who have normal appetites and who are developing and gaining weight appropriately. The abdominal pain may occur at any time of the day, but doesn’t usually wake the child from sleep (inability to sleep because of pain needs investigating). Children usually describe their pain as a vague ache which is sited around the umbilicus. The more precisely the child can locate the pain and/or the further away it is from the umbilicus, the more likely is it to have an organic cause.

Generally, children with RAP report that their painful episodes can vary in duration and intensity. Most would last a few minutes though pain of several hours duration is not
uncommon. While pain is present, most children have to stop playing and less commonly they may have to lie down. Nausea and vomiting are not associated features of RAP.

For parents, the most worrying aspect of RAP is the fact that it recurs. One episode of abdominal pain can be attributed to something the child ate; recurrent pain suggests a more sinister cause (‘if pain persists, see your doctor’). Unfortunately, anxieties can be reinforced if the attending health professional dismisses the pains as unimportant, or conversely, launches into complex investigations to discover an elusive organic cause. A middle way needs to be navigated.

This middle way needs to acknowledge the child and parent’s anxieties. During the interview the child needs to be addressed directly (it is their pain after all). Both parties need to feel that the practitioner is taking the painful symptoms seriously and that there exists a commitment to reviewing the situation as needed. Both parent and child need to know that there will be an interested and sympathetic ear available if symptoms change or worsen. Most importantly, parents don’t want to immediately hear that their child’s pain is psychosomatic, emotional or the result of stress. Naturally these factors need to be explored, but this should be done with sensitivity. Most parents are comfortable with the concept that worry or stress can cause disease; but they also want to feel confident that organic causes have been seriously considered and investigated.

While there is no evidence to suggest that screening tests are helpful in the diagnosis of classical RAP, some parents can find selective testing very reassuring (remember if painful symptoms are atypical, appropriate investigations should be seriously considered). Finally, once organic causes of abdominal pain have been excluded, careful explanation about the nature and incidence of classical Recurrent Abdominal Pain of childhood can be very reassuring and is a treatment in itself for many parents and children.

Forty years after Apley our understanding of RAP remains rudimentary; we still don’t know the cause of the condition and as such no uniform treatment has been formulated. Recurrent Abdominal Pain remains a commonly occurring, but mysterious condition.

Table 1

<table>
<thead>
<tr>
<th>FACTORS NOT ASSOCIATED WITH RAP</th>
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<tbody>
<tr>
<td>• a child who is unwell, anorexic or losing weight</td>
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<tr>
<td>• a child who is woken from sleep by pain</td>
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<tr>
<td>• a child whose pain is situation dependent</td>
</tr>
<tr>
<td>• a child whose pain is uni-focal or located away from the umbilicus</td>
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REFERENCES


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ON THE SHELF

PAEDIATRIC HANDBOOK
Fifth Edition 1995
By the Staff of the Royal Children’s Hospital
400 Pages. Price $33.95 (plus $4 for mail orders)

The Paediatric Handbook is a practical management guide to the common health problems of newborn infants, children and adolescents. It provides a valuable reference for practitioners involved in the care of children in the community. The fifth edition has been comprehensively updated. All chapters have been improved and many have been extensively revised and expanded. New chapters include: Common Developmental and Behaviour Problems, Rheumatologic Conditions, Pain Management, Paediatric Health Maintenance, and the Death of a Child.

The coverage of the book has been broadened for both national and international audiences, and information specific to the Royal Children’s Hospital has been included in a separate chapter.

The book is concise, practical and completely up to date. It can be recommended as a basic guide to the day-to-day management of most common paediatric disorders.

HELEN ROWAN, MANAGER
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Available from the Child Health Information Centre, a specialist bookshop, information and referral centre for health professionals, parents, teachers, and adolescents.

A complete booklist is available for mail orders, phone (03) 9345 6429, 9.30-4.00 weekdays.
Depression in children

The term depression may be used to describe a ‘symptom’ - the sad feelings that are a common experience of everyday life; a ‘mood state’; a more pervasive state of feeling low or sad or a ‘syndrome or disorder’; a constellation of symptoms including depressed mood, loss of interest in activities; feelings of worthlessness; sleep and appetite disturbances and suicidal thoughts.

Prevalence
Depression is much more common among children than was previously recognised. It is uncommon among preschool children but rates of 2% have been reported among primary school children. Community surveys report that up to 15% of secondary school students report feeling depressed, with over 1% being severely clinically depressed. Boys report depression more often than girls before puberty, however this trend is reversed in adolescence when girls report depression more often.

Assessment
Parents or teachers may notice decreased social interaction, sad facial expression, slowed speech and motor activity, early morning or intermittent wakening from sleep, loss of interest and a fall in academic performance. However such alterations in mood may pass unnoticed unless the child draws attention to themselves by misbehaving, threatening or even attempting suicide. It must be emphasised that attempted suicide is uncommon among primary school children and completed suicide is extremely rare, although there have been case reports as young as seven years. Children may experience dysphoric mood, self-deprecatory thoughts, low self-esteem, and hopelessness long before adults around them become aware of the intensity of their distress. If this is one of the essential differences between the so-called ‘Internalising Disorders’ which are experienced primarily by the child, and the ‘Externalising Disorders’ which are usually recognised much earlier because the child draws attention to themselves by exhibiting a range of difficult behaviours.

There are a number of standardised measures of depression for use in childhood. The Children’s Depression Inventory (CDI) (Kovacs and Beck, 1977) is the most commonly used self report scale, while the Children’s Depression Rating Scale (CDRS) (Poznanski et al, 1979) can be used by the clinician or community nurse to assess symptoms of depression.

The core symptoms of depression are similar in adults and children, therefore DSM IV criteria may be used to diagnose depression in all age groups. Loss of interest in school and deteriorating school performance are unique to children although they are similar to work-related changes in adults. Prepubertal children may appear more overtly depressed and have more somatic complaints while adolescents may exhibit more anhedonia (loss of pleasure), hopelessness, and hypersonnia.

Differential diagnosis
Dysthymic Disorder is essentially a mood disorder in which symptoms of depression are often less severe but more pervasive, lasting more than a year with depressed mood being present most of the day on more days than not.

Children with Separation Anxiety Disorder may have symptoms of depression, but these are usually associated with separation or threat of separation from key attachment figures. The most common manifestations of this are school refusal or recurrent abdominal pain.

Adjustment Disorder with depressed mood refers to depressive symptoms that emerge as a reaction to an identifiable psychological stressor, such as parental divorce, occurring in the six months prior to presentation. To qualify as an Adjustment Disorder the symptoms must be in excess of what is considered a ‘normal’ expected reaction to the particular event. A child would be expected to respond to a severe stress such as the death of a parent with symptoms of depression such as distress and sadness for a significant period. It is therefore a matter of judgement whether the symptoms are sufficient to warrant a diagnosis of depression requiring treatment.

Clinical course and prognosis
Longitudinal studies have shown that the spontaneous recovery rate from depression is high (cumulative probability = .97) within months, however recurrences are common.

Management
Understanding the social circumstances of the child and the precipitants of depression helps in planning treatment. Once depression has been identified as a possible cause of the child’s problems there are several important steps in management. One must decide whether to manage the problem oneself together with the parent(s). This will depend on the severity of the depression, identification of a recent stressor and any concerns
about suicidal risk. If the depression is of recent onset, there is an identifiable stressor, parents are supportive and understanding, and there is no suggestion of suicidal risk then it is reasonable to adopt an approach which involves explanation and reassurance to parents together with encouragement of the parents to discuss these feelings with the child while supporting and comforting them.

Indications for a referral to a psychiatrist or a child and adolescent mental health service include:
- suicidal threats or behaviour
- marked vegetative symptoms, where antidepressant medication can be a helpful adjuvant in treatment
- a family history of depression or suicide
- if the primary care worker does not feel sufficiently experienced in the diagnosis and management of depressed children.

There is no conclusive evidence for the superiority of one psychosocial approach over another. Successful interventions are outlined in Table 1.

Table 1

DEPRESSION IN CHILDREN - SUCCESSFUL INTERVENTIONS

- Introduction of pleasurable activities
- Cognitive therapy that involves restructuring pervasive focus on negative aspects of experience of self, world and future
- Orchestrating positive reinforcement from the family
- Interpersonal problem solving skills
- Relaxation, particularly if there is a concurrent Anxiety Disorder
- Involving parents and teachers in treatment to act as trainers, and rectifying their maladaptive interactions with the child
- attending to life situations such as abuse, broken home, and parental psychopathology.

American Psychiatric Association (1994) 'Diagnostic and Statistical Manual of Mental Disorders' (4th ed)

REFERENCES


FROM THE LITERATURE

Non-intentional asphyxiation deaths due to upper airway interference in children 0 to 14 years
A. Allmann & T. Nolan
Injury prevention 1 (2) June 1995 pp76-80

During the 10 year period 1985-1994, 42 cases of children dying of asphyxia in Victoria, were identified. Eight deaths were caused by choking - 6 related to food and 2 to small objects; five were due to suffocation (1 with plastic), and the remaining 29 were due to strangulation. Of the sixteen strangulations with ropes and cords, 7 were associated with homemade rope swings, and 5 were due to curtain or blind cords. Neck entrapment occurred in 13 cases. Half the infant deaths were in unsafe sleeping environments.

"The results indicate two main risk groups for asphyxiation: infants, who were at risk from facial occlusion, neck entrapment, and foreign body aspiration and children over 1 year who were at risk from strangulation by ropes. The main mechanisms of asphyxiation are noticeably consistent and repetitive, and virtually all these deaths could have been prevented." The authors note that the failure of voluntary standards for children's products indicates the need for more standards to be legislated; there is no labelling on food packages regarding age appropriateness; and consideration needs to be given to non-removable warning labels to be placed on domestic rope products, including skipping ropes and clothes lines. Targeted education of parents, carers and health professionals is also necessary.