Functional somatic complaints in children and adolescents:

What could be beneath the veil?

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Introduction

Somatic complaints without an apparent physical cause are common among children and adolescents.[1] The most common complaints include headaches, stomach aches, musculoskeletal pains, back pain, dizziness, and fatigue. Young boys and girls are equally likely to have somatic symptoms, but girls begin to report more somatic symptoms than boys in adolescence, and this difference continues into adulthood.

Such children (meaning children and adolescents) are the subject of extensive (and expensive) investigations. When diagnostic measures fail to reveal a physical abnormality to account for the complaints, it is often postulated that the child is presenting with a 'functional' somatic complaint. Sometimes that is seen to be the end of the matter; there is nothing wrong and it is 'all in the head' (pardon the pun). A 'functional' label should, in fact, be the beginning of a different perspective rather than the end of the matter. These complaints carry special significance to the child and should be pursued. This article aims to aid family physicians develop an outline for a strategy for managing children with such complaints and determine what lies behind these complaints.

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First, though, some clarification of terms is necessary. There are three terms that can be a source of great confusion and potential error in management: somatoform disorders, somatisation disorders and somatisation. *Somatoform disorder* is a group of disorders with specific diagnostic criteria as defined in the DSM-IV[2] where the core symptoms include somatic symptoms. *Somatisation disorder* is one of those disorders (see below). *Somatisation* is not a diagnostic category but rather an unconscious process in which physical symptoms become symbolic for psychological problems. They are means of communicating worry, anxiety and distress, and receiving social support and sympathy.

Generally, functional somatic complaints fall into two categories (excluding malingering):

1. Those that constitute a formal psychiatric disorder (somatoform disorders). This is a special diagnostic group which consists of psychiatric disorders with their own diagnostic criteria. For example, a child with conversion syndrome might present with blindness, pseudoseizures, or partial paralysis of a limb.
2. Those that are part of the clinical presentation of a psychiatric disorder. For example, the abdominal pain or nausea associated with separation anxiety and school refusal, or headache in depressed children.

These two categories are not all inclusive. Many children who somatise do not fall into a specific diagnostic category, or are associated with formal psychiatric disorder. However, they often show psychiatric symptoms that do not constitute a full syndrome as

well as showing signs of psychosocial stress and adverse family dynamics.

Those that constitute a formal psychiatric disorder (somatoform disorders)

Somatoform disorders are described in the DSM-IV as follows: *'One or more physical complaints (e.g. fatigue, loss of appetite, gastrointestinal or urinary complaints) where either appropriate evaluation uncovers no organic pathology or pathophysiologic mechanism (e.g. physical disorder or the effect of injury…) to account for the physical complaints,'*[2] or *'when there is related organic pathology, the physical complaints or resulting social or occupational impairment is grossly in excess of what would be expected from the physical findings.'*[2] (See Fritz et al.[3] for a comprehensive review)

Conversion disorders

According to the DSM-IV, diagnosis of conversion disorder requires one or more symptoms or physical deficit, that psychological factors are judged to be associated with the symptoms or deficit, that the symptom or deficit is not intentionally produced, that it causes clinically significant distress or impairment, and that it is not limited to pain or sexual dysfunction.[2] Presenting symptoms are usually temporally related to psychological distresses.

Classically, conversion symptoms resemble a neurological dysfunction such as paralysis, paraesthesias, or anaesthesia. The most commonly reported in children include: pseudoseizures, gait disturbances, sensory problems and respiratory difficulties. Conversion symptoms may cause more distress among parents than the child. They are usually selflimiting, resolving in most cases within three months. The disorder is rarely found in children less than ten years of age, but the incidence increases with age and reaches its peak in adolescence.

Particular attention should be paid to reinforcement such as increased attention by parents and caregivers.

Pain disorder

According to the DSM-IV, pain disorder is characterised by pain in one or more anatomical sites and is of sufficient severity to warrant clinical attention.[2] The diagnostic criteria also include distress or impairment, that psychological factors are judged to have an important role in the onset, that the pain is not intentionally produced, and that the pain is not accounted for by mood, anxiety or psychotic disorder. The diagnosis of pain disorder in children and adolescents can be extremely difficult.

Hypochondriasis

According to the DSM-IV, hypochondriasis is a preoccupation with fear of having, or the idea that one has, a serious disease.[2] The preoccupation persists despite appropriate medical evaluation and reassurance, is not of delusional intensity and is not restricted to concern about appearance. The preoccupation should be present for at least six months and causes significant distress or impairment in functioning. The fear cannot be alleviated by medical reassurance. It is often accompanied by anxiety and exacerbated by mild genuine physical illness. This disorder has rarely been diagnosed in children and infrequently in adolescents.

Somatisation disorder

According to the DSM-IV, somatisation disorder refers to a history of many physical complaints that occurs over a period of several years and results in treatment being sought and significant impairment in social, occupational, or other important areas of functioning.[2] The diagnostic criteria for somatisation disorder are quite specific, requiring a history of pain in at least four different body sites, at least two of which are gastrointestinal symptoms, one sexual or reproductive symptom, and one pseudoneurological symptom other than pain. The actual diagnosis of somatisation disorder is quite uncommon in child and adolescent populations. However, many children and adolescents manifest the incomplete syndrome.

Body dysmorphic disorder

According to the DSM-IV, patients with this condition are preoccupied with the idea that they are physically misshapen.[2] This preoccupation, which often involves the skin, is not held with the same conviction as a delusion. Typically, when a slight physical anomaly is present, the person's concern is markedly excessive. The preoccupation causes clinically significant distress or impairment in functioning and is not better accounted for by another medical disorder. For example, an adolescent may present complaining of disfigurement as a result of slightly prominent veins or minor acne. These patients usually refuse psychiatric treatment, insisting that they need other medical or surgical intervention.

Factitious disorder

Factitious disorder presents with physical symptoms feigned or intentionally produced with the goal of maintaining the sick role. These patients fabricate medical histories or deliberately produce physical symptoms (either in themselves or in their children) in order to meet an unconscious need. Munchausen's by proxy, a diagnosis that is most often made in the paediatric setting, is included in this category. Mothers repeatedly complain of non-existing, or actually cause, symptoms in the child that require medical attention. In as many as 20% of the cases of Munchausen's by proxy, mothers themselves may be diagnosed as having Munchausen's syndrome. Children under the age of five are considered at higher risk because they are dependent upon their parents and lack the developmental sophistication to protect themselves or communicate clearly.

Those associated with psychiatric disorders

Children and adolescents with depression often have somatic complaints. Somatic complaints were reported in 69.2% of children referred for emotional or behavioural problems.[4] The frequent overlap in symptoms between depression and medical illness (e.g. changes in appetite or weight, fatigue) presents a problem for the clinician who is trying to decide between organic and psychiatric disorders. It appears that somatic symptoms may not be such an important source of confusion in the diagnosis of depression in children, and may not radically influence diagnosis. Clinicians can place more emphasis on psychological symptoms when diagnosing depression in medically ill or somatoform disorder patients.[5]

Anxiety disorders frequently present with somatic complaints, particularly separation anxiety disorder and panic disorder. Children with school refusal often complain of pains, nausea, vomiting, dizziness and fatigue. Others with severe anxiety disorder often complain of various aches, stomach upset, palpitations and breathing difficulties. However, somatoform and anxiety disorder (with their own somatic symptoms) may overlap.

Similar somatic complaints are often encountered in children with phobic disorders and obsessive-compulsive disorder.

The key issue in this situation is recognising and making a formal diagnosis of psychiatric disorder. Treatment along conventional lines, depending on the diagnosis, may be possible in primary care setting but more complex cases should be referred to the psychiatric service. In the vast majority of cases the somatic symptoms disappear as the psychiatric disorder improves.

Some common presentations

Recurrent abdominal pain (RAP)

Recurrent abdominal pain has been defined as at least three episodes of abdominal pain, severe enough to affect the activities of the child, occurring over a period of at least three months. About 10–25% of children and adolescents are reported to suffer from RAP. Older children, especially girls, are more likely to get RAP. It is usually not associated with any other somatic clinical features or laboratory abnormalities. Most often RAP is considered as a functional disorder, although it is commonly associated with symptoms of anxiety and depression and other somatic symptoms such as headaches. Lake provides an excellent review of this topic.[6]

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Family influences seem to be important in the genesis of RAP. Emotional problems, somatic complaints, and reward for illness behaviour are more common in families of children with RAP.[7] About 30–50% of children with RAP continue to have the same problems in adulthood.[8]

Headache

The prevalence of recurrent headache among children is estimated to be 10–30%.[9,10] Headache is sometimes associated with psychiatric disorders such as depression and anxiety.[4] However, apart from that, headache commonly presents in two forms:

Tension headaches: The vast majority of recurrent headaches in children can be described as tension headache. These headaches may be difficult to differentiate from migraine in young children, and usually present as a bilateral pressing pain or tightness occurring anywhere on the head, including the top of the head. The pain is usually constant, not throbbing, and of mild to moderate severity lasting from 30 minutes to several days. It is not precipitated by routine physical activity and is not associated with nausea or vomiting. There may be mild photophobia or phonophobia. It is possibly related to stress as it is present in stressful situations, absent in certain situations such as play, and usually has a temporal relationship to stress factors. However, the specific cause/effect is not yet clear. There could be secondary gain such as over-involvement of parents.

Chronic daily headache: This type of headache usually occurs mostly in adolescents almost daily and fluctuates throughout the day. It is usually diffuse in nature, mild to moderate in severity and poorly described. The adolescent often does not appear 'ill' despite complaining of a constant headache. There are usually no other associated symptoms. This complaint is not well described in the literature and its cause remains unknown. However, psychosocial stress probably plays a role in the vast majority of these patients.

Fatigue

Fatigue and tiredness can be symptoms of depression among children. However, excluding other organic causes, children who frequently present with fatigue are likely to be suffering from chronic fatigue syndrome (CFS). There is considerable debate about the nature of CFS and how it relates to the concept of psychiatric disorder and somatisation. Notwithstanding the merits of that debate, it is appropriate to outline a brief account of that condition in relation to children in this article at least for the sake of completion.

Chronic fatigue syndrome (CFS) is widely recognised in adults, but it is not as well known that children and adolescents can have the illness. CFS has been found in children as young as age five.[11] As in adult CFS, symptoms may include sore throat,

joint pain, migraines, irritable bowel syndrome, post-exertional malaise, sleep disorders, photosensitivity and impaired concentration and memory. The cognitive disturbances in CFS can lead to reduced concentration, short-term memory loss and confusion, and may be confused with attention deficit disorder in children. These symptoms may be hard to recognise because children do not have as much experience as adults in judging their own cognitive abilities. Paediatric CFS is often mistaken for school phobia, anxiety disorder or depression. Failure to make a proper diagnosis can lead to isolation, insecurity and family stress. Examining the child's school attendance and activity levels, as well as establishing a symptom pattern, can help diagnose CFS. However, that may be complicated by the fact that children sometimes have difficulty recognising changes in energy and in the case of very young children are unable to verbalise what they are experiencing. Some children with CFS do not perceive themselves as being ill because they have no clear reference for normal health. See Garralda and Rangel for a useful review.[12]

Pseudoseizures

The term 'pseudoseizure' refers to any non-epileptic episode that simulates an epileptic seizure. They may occur as a somatoform disorder in children and adolescents and are commonly misdiagnosed as epilepsy. They are often associated with psychiatric co-morbidity and psychosocial stressors. One study among children with pseudoseizures found that 32% had mood disorders including major depression, bipolar disorder, or dysthymic disorder, usually with severe psychosocial stressors, 24% had separation anxiety and school refusal with moderate psychosocial stressors, and 32% had a history of sexual abuse, more commonly among those with mood disorders. In addition, 44% had severe family stressors including recent parental divorce, parental discord, or death of a close family member.[13]

Pseudoseizures are usually diagnosed by analysing the patient's history. Andriola and Ettinger provide a useful review of the topic.[14]

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Vocal cord dysfunction (VCD)

This condition can easily be confused with intractable asthma. Children with VCD have often undergone extensive aggressive treatment for asthma including inhaled corticosteroids, without improvement. It is essentially characterised by narrowing of the glottis as a result of adduction of the vocal cords (which can be seen on laryngoscopy). Although the cause of it is undetermined, it is likely to be related to stress or a past history of trauma. A careful clinical history would reveal the lack of nocturnal symptoms of asthma and clinical examination reveals restriction of wheezes to the upper chest. Blood gases are usually normal.

Multiple somatic complaints

Children often present with multiple somatic complaints. Garber stated that 50% of children report more than one somatic complaint.[15] About 15% report four or more, and 1% have as many as 12 symptoms. This pattern is more common in adolescents than children and among girls than boys. Apart from somatisation disorder, children with multiple somatic symptoms show more symptoms of depression and anxiety[15] than children with fewer or no somatic symptoms.

What can the GP do?

Although many somatising children and adolescents exhibit poor social functioning, they tend to use medical rather than mental health services and consequently primary care clinicians will see these patients far more often than psychiatrists and psychologists and other mental health services.

Garralda recommended that the primary care physicians and paediatrician become comfortable with the following skills:[16]

1. An awareness of important psychosocial factors in the child's presentation and the interview skills needed to gather relevant information.
2. An ability to make simple recommendations on the management of behavioural problems like tantrums, oppositional behaviours and separation anxiety.
3. Counselling skills to intervene and eventually advise families on solutions to ineffective discipline techniques and concerns about the school environment.
4. Familiarity with family dynamics in order to identify marital problems and overprotection of the child.
5. An ability to make an appropriate referral to psychiatric services.

In the assessment and appraisal of children who frequently present with functional somatic complaints, it is recommended that the family physician:

1. Be aware of the relationship between somatisation and mental health issues. Screening is a very useful habit to get into. As screening questions are used for a physical disorder, it is important to screen for psychiatric issues (and it is amazingly cheap to do so with a brief screening tool). In particular, look for parental difficulties – including discord, psychiatric disorders in parents such as alcohol and drug abuse, anxiety disorders and depressive disorders (and somatoform disorder itself). In the child look for relationship problems with siblings, learning difficulties, school problems, social anxiety and depressed mood.

2. Take a biopsychosocial rather than a biomedical approach. Somatisation and somatisation disorders are the best demonstration of the concept of the biopsychosocial model of health care. A more complete understanding of the symptoms must take into account not only biological, but also psychological and social factors.
3. Take a view that in children who frequently present with somatic complaints, assessment is not an event. It is a process that should take place over time and within a respectful, trusting relationship with the child and parents. Patience is a necessary virtue. Explorations of psychological stress and conflicts in the child and in the family are important. External environmental stresses at home and in the school should be explored.
4. Look not only for factors that may *cause* the symptoms, but also for factors that *maintain* it such as parental responses, parental anxiety and secondary gain for the child.
5. As a matter of principle, and once physical causes for the complainers have been ruled out, the use of investigations should be minimised. Once the family is reassured that an organic problem is not evident, explanations that the child is experiencing tension and perhaps other upsetting emotions should be offered. The family should be given every opportunity to express their worries and concerns.

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When to refer on to the psychiatric service?

The main indicators and indications for a referral to the child and adolescent specialist psychiatric service are:

1. When there is a definite psychiatric disorder as outlined above, which the family physician feels needs more intensive treatment.
2. For a diagnostic clarification and workup when there is significant uncertainty about the impact of psychological factors.
3. When there are significant complex environmental or family problems that need a specialist approach and which, if unresolved, could maintain or perpetuate the somatic symptoms.

Finally, the manner in which a referral to the psychiatric service is discussed with the family is vital. It should follow a good, comprehensive medical appraisal and a tactful discussion about the significance of the symptoms with the family and the child. Extreme care should be taken in avoiding statements that show doubt about the child's truthfulness.

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