

An approach to functional abdominal pain in children and adolescents

BACKGROUND

Most chronic abdominal pain in children and adolescents is functional, lacking objective evidence for organic pathology. Approximately 15% of schoolchildren experience weekly episodes of abdominal pain and 8% consult a doctor.¹

Diagnosing functional abdominal pain (FAP) in childhood is challenging because the condition lacks established diagnostic criteria. However, children are poorly served if as a result FAP becomes a diagnosis of exclusion.² This article outlines an approach to assessing such children and provides suggestions on management. Making a positive diagnosis and agreeing a treatment plan relies on the art of practising medicine and GPs are best placed to adopt a holistic approach to such children.

HISTORY

Children usually describe the pain as periumbilical or else affecting multiple sites. Headaches are frequently associated with FAP. Nausea rarely has an organic basis in children and likely indicates functional symptoms. In contrast, vomiting, gastrointestinal bleeding, weight loss, or diarrhoea suggest an organic cause.

Pain on morning wakening, which improves in the afternoon and becomes severe again prior to bedtime suggests FAP. A hallmark of FAP is school absenteeism whereas children with organic diseases attend regularly. The children rarely remain in bed instead lying on the couch watching television. At night, pain may delay the onset of sleep but seldom awakens them. Parents may emphasise the severity of pain and associated pallor and lethargy in response to any suggestion of non-organic aetiology. Children will sometimes develop severe pain in the surgery during such a discussion.

Garralda described such children as conscientious, obsessional, sensitive, insecure, anxious, and prone to peer relationship problems.³ Separation anxiety

should be explored, asking about the child's response when left with a babysitter. Anxiety is not necessarily based on fear for themselves but that their parents may come to harm if they are not with them. Similarly pain in school may reflect separation anxiety rather than school issues.

Inquire about parental illness, bereavement in close family members especially grandparents causing children to worry about their parents mortality, financial problems, unemployment, and marital disharmony. Parents often fail to appreciate that children as young as 6–8 years are aware of and worry about such issues.

EXAMINATION

Observe the child arriving at your clinic. A child with prolonged, disabling symptoms who looks well and is thriving raises the possibility of functional symptoms.

A thorough physical examination is essential including assessment of growth, anaemia, clubbing, oral ulceration, and perianal disease. Parents should observe the abdominal examination as distraction, often achieved by discussing siblings, can result in marked abdominal tenderness disappearing. It is important for parents to observe this but vital to reassure them that disappearance of tenderness during distraction does not mean the pain is fraudulent.^{3,4}

TREATMENT

Parents are often aware that pain may be related to anxiety yet feel obliged to consult medical services when symptoms persist.³ Despite this they resist discussing stress, fearful it may distract from a comprehensive assessment. However, the possibility of potential non-organic causes must be raised early in the consultation. Commencing investigations before discussing stress makes subsequent acceptance of a functional diagnosis difficult with the doctor appearing to have run out of ideas as to possible organic causes.^{4,5} Blood tests,

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ultrasound, computed tomography examination, and endoscopy provide no benefit in investigating chronic abdominal pain without alarm symptoms.^{1,2}

Establishing empathy and supporting empowerment is essential.⁴ GPs should adopt a positive approach and not be dismissive. Parents and children need reassurance and must not feel discredited. Specific worries about potential causes, for example, cancer, must be addressed. Children and parents can be empowered by explaining that stress causes pain that is genuine and that you frequently see such patients.^{4,5}

An explanation for symptoms must be provided. A useful approach is to equate the concept of functional pain with the parents' personal experience. Ask if they themselves get headaches when worried, nauseated when given bad news, or develop loose stools when anxious. This helps parents to accept that stress causes pain and it is a normal response, not fraudulent.

Parents need to be convinced to reduce solicitous responses to their child's pain and instead focus on distraction from the pain.⁶ Doctors, parents, and teachers should cooperate to identify and remove reinforcements for functional symptoms. Reinforcement involves facilitating the sick role; for example, keeping a child from school with access to TV or receiving priority attention ahead of other siblings. At school, regular use of the sick room and sending the child home reinforces symptoms.

The child should not associate pain with removal from normal activities. Children should attend school irrespective of pain. This is difficult but parents are usually soon delighted with progress. The teacher needs reassurance with a letter from the doctor explaining the pain is functional but acknowledging its genuine nature. Pain during class is managed by continuation of the usual routine. Gradual re-introduction of a child to school (for example, half-days) may paradoxically reinforce symptoms.

For adults with functional symptoms, indulging in excessive investigations, giving

ambiguous and contradictory advice, and failing to accept complaints as genuine, usually result in poor outcomes.^{5,7} In contrast, patients report favourably on doctors giving explanations for functional pain that make sense, remove blame from patients, and generate ideas about the management of symptoms.⁴ Similarly for children with functional pain the critical factor associated with recovery is parental acceptance at the time of diagnosis of a bio-psychosocial model of illness.⁸

Regular follow-up visits, if required, can both reassure parents and allow for monitoring for any alarm symptoms. When symptoms persist, referral to child psychology or psychiatry can be helpful especially as cognitive behavioural therapy has been shown to be of benefit in resistant cases.⁶

SUMMARY

For children with chronic abdominal pain, the early introduction of stress as a potential cause is likely to improve outcome. Parents underestimate their child's awareness of and capacity to worry about everyday events. Parents, children, and teachers need to be convinced that functional symptoms are a normal feature of life. The need for empathy and quality discussion between doctor, parents, and child concerning potential causes of stress is critical. All reinforcement should be removed including insistence on continued school attendance. Cognitive behavioural therapy appears to be helpful in resistant cases. Medication such as antidepressants should be avoided unless prescribed by a child psychiatrist.

Provenance

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