

Abstract from a scientific paper presented by the authors in May 2008 in York

Title of Abstract:

“Does abdominal wall pain cause chronic abdominal pain in children?”

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Abstract:

Background:

Up to one child in six suffers from chronic abdominal pain (CAP). Classically no underlying organic cause can be identified. The child's general well-being is affected and often a poor school attendance is associated. Managing these patients can be challenging and can lead to invasive investigation and tertiary referral.

We have observed that in some patients with non-specific abdominal pain, symptoms were made worse by movement and a positive Carnett's sign (pain made worse by tensing abdominal muscles) could be elicited. These features have been described in adults with abdominal wall pain (AWP). We therefore investigated whether CAP in these children was of musculo-skeletal origin and hence responsive to treatment with physiotherapy.

Methods:

We performed a retrospective case notes review of all children aged 18 year or younger referred from the paediatric gastroenterology clinic to the paediatric physiotherapy department for assessment of CAP possibly due to AWP. During physiotherapy assessment the children were examined for abnormal posture and whether or not pain was elicited on spinal palpation. Following assessment six treatment sessions and a home exercise plan were offered to improve core stability. Telephone contact was maintained for a further 3 months. If no response was obtained they were referred back to Paediatric Gastroenterology.

Results:

Fifty-nine patients (46 female) with possible AWP were identified with ages ranging from 6 years to 16 years (mean age 11 years and 5 months). A total of 45 completed their course of physiotherapy. Of these 33/45 (73.3%) showed a complete resolution of their symptoms, 8/45 (17.7%) showed reduced severity and duration of abdominal pain and 4 patients (9.0%) showed no response to physiotherapy. 14 patients did not complete their physiotherapy course: 8 patients did not attend initial assessment, 3 started an alternative treatment and 3 patients did not tolerate physiotherapy.

Conclusions:

AWP is a well recognised cause of abdominal pain in adults. This case series suggests that AWP might be a cause of CAP in our paediatric population and is thus amenable to treatment in the majority of affected children with physiotherapy. Being mindful of the placebo effect of interventions in CAP we propose a randomised trial of physiotherapy vs. an alternative treatment such as relaxation therapy.