# A case-control study of somatic and behavioural symptoms in sexually abused boys

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## Abstract

*Objectives*—To ascertain how often sexually abused boys present with somatic and behavioural symptoms.

Design-A case-control study.

Setting—A primary school in South Wales where a male teacher had been convicted of sexually abusing boys since 1981. The police investigation started in 1993 and he was convicted in 1994. A similar large primary school where abuse had not taken place.

Subjects—All 107 boys who had been identified by a police inquiry to have been subject to sexual abuse by a single teacher in a single primary school; 107 age matched controls.

Main outcome measures—Symptoms that might have had a somatic or behavioural basis reported in general practice, hospital, and school health records.

**Results**—Somatic and behavioural complaints were uncommon in both cases and controls. There was no significant difference between the numbers of cases and controls who had presented with somatic and behavioural complaints (18 cases v 25 controls). However the difference between the cases and controls with symptoms lasting over a year was significant (p < 0.05). There were no differences in the nature of reported symptoms between the control and abused groups.

Conclusions—This suggests that extensive investigation for possible abuse is not indicated where there are short lived somatic symptoms but it should be considered as a possible diagnosis where symptoms are long standing.

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A number of somatic symptoms and signs have been described as being associated with sexual abuse of children.<sup>1 2</sup> These include recurrent abdominal pain, headaches, anorexia, constipation, soiling, and enuresis. The significance of somatic symptoms as an indicator of sexual abuse is, however, unclear. Mzarek and Mzarek state 'given the serious methodological problems of most of the case reports and research studies, the conclusions regarding the effects of childhood sexual abuse must be considered very tentatively'.<sup>3</sup>

At a psychological level the suggested mechanism is that a somatic or behavioural symp-

tom is the child's response to a stressful situation. However, Hill states that not every child will react in the same way to an identical stressor.<sup>4</sup> Indeed those children who demonstrate an immediate or long term reaction may do so in different ways. It may be also that children have symptoms resulting from abuse but do not present for medical attention either because they do not tell their parents or parents ignore their symptoms. This begs the question of what proportion of cases of sexual abuse present with somatic symptoms before disclosure. Knowing this may help us to decide whether we should investigate children who present with abdominal pain and other somatic symptoms for sexual abuse and what priority should that be given in the differential diagnosis

We have had the opportunity to compare a group of boys abused by one man with age matched non-abused controls. The abuser, aged 49 years, was a qualified primary school teacher who subjected his victims, exclusively males, to varying degrees of sexual abuse: from bottom handling over clothes to genital fondling. This progressed if unchallenged, to oral sex and mutual masturbation. Some boys also reported anal fingering. The teacher also abused boys during residential courses. The majority of boys were aged 8 to 10 years. The abuse took place in the classroom during reading and marking time, in a stock room, and during computer lessons and at lunch time behind closed doors. Reported incidents date back to 1981. He was convicted in 1994.

#### Methods

This study involved all the 107 boys who had been identified by police inquiry to have been subject to sexual abuse by one teacher in a single primary school. We also studied 107 boys matched for age with the abused boys. These control boys came from the same part of South Wales with a similar demographic background and attended a different large primary school. We identified these controls using the child health computer for primary schoolchildren and the school records of the comprehensive school to which they would have moved. We matched the controls for age with individual abused boys. We obtained permission from the local ethics committee before accessing the records of the boys.

We obtained information from general practice records, school health records, hospital records and the records of consultant child psychiatrists, on any symptoms that might have had a somatic or behavioural basis between

Length of symptoms	Cases	Controls
No symptoms	89	82
Under 3 months	8	23
Between 3 months and a year	2	1
Over a year	8	1

school entry and before identification by the police inquiry. We excluded symptoms caused by known organic disease. None of the doctors knew of the possible diagnosis of sexual abuse when making the notes we examined.

# Results

No general practitioners or specialist doctors refused to help with the study. There were no lost records. We found that all the symptoms, both in cases and controls, had been presented to the general practitioner. The results are shown in table 1.

Somatic and behavioural symptoms were uncommon in both groups of boys with 83.6% of cases and 76.7% of controls not having symptoms. There was no significant difference on  $\chi^2$  analysis between cases and controls who had presented at some time with somatic symptoms (18 subjects v 25 controls). However there were more abused children than controls with symptoms over a year (eight cases and one control). The difference between the cases and controls with symptoms over a year was significant p < 0.05.

There were no significant differences in the nature of reported symptoms between the control and abused groups. The symptoms we found included abdominal pain, chest pain, headaches, unexplained sensory loss in the forearm, and behaviour problems (which included not attending school). There were six children with behaviourally related problems from the abused group and five from the control group. It was difficult to assess the severity of the abuse. However out of the 18 abused boys who presented with symptoms, 10 were subject to indecent assaults during a residential course. Of the eight children with long term problems, two boys had behaviour problems lasting for several years and are now adults under the care of psychiatrists. One of these was indecently assaulted on several occasions in school and the other was stripped and fondled in class. The remaining six boys had been subject to abuse in the classroom including genital fondling and bottom touching and had somatic symptoms for over a year. They do not have symptoms now. The control child with long term problems also does not have symptoms now. He was seen on several occasions over a period of over a year by his

general practitioner because of secondary enuresis. There were significant marital and social problems within the family at this time. We offered counselling and support to all these children and their families.

# Discussion

There is no doubt that sexual abuse is harmful to children. Hobbs et al classify the evidence from: observation around the time of diagnosis, from follow up of children, from studies in abused and non-abused adults, and from observation of adult psychiatric patients.1 Shame, lack of self esteem, and disordered sexuality may cause problems throughout adult life.5 In a study of child sexual abuse in Leeds, Hobbs and Wynne found that 19% of their 337 cases were abused by unrelated men. There recently have been examples of institutional and extrafamilial abuse: among social workers, care assistants, teachers, priests, and paediatricians. The detection of the abuser in this case had a profound effect on the community in which he worked.

Children may present with non-organic and behavioural symptoms after sexual abuse.<sup>2</sup> What is difficult to answer is the question: what proportion of children present with these symptoms between abuse and disclosure? Our study showed that somatic and behavioural symptoms are uncommon in both abused and non-abused boys and that there were no significant differences in short lived somatic or behavioural disturbances between these groups. Nevertheless these symptoms lasting for over a year are more common in sexually abused boys. This suggests that extensive investigation for possible abuse is not indicated in short lived somatic symptoms but should be considered when there are long standing symptoms.

Our work looked at symptoms that presented after abuse. The number of children with reported behavioural symptoms is considerably less than that found by Dubowitz et al.<sup>7</sup> This may be because we looked at presentations before abuse was disclosed rather than questioning victims after disclosure.

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