Interpreting the signs of sexual abuse of children

It is unlikely that there will ever be simple remedies to the problems that arise in the care of children suspected of being subjected to sexual abuse. Nevertheless, with a greater understanding of the nature of those problems we should be able to provide a better service. During the Cleveland Inquiry in 1987 it became clear that differences between professionals had added to the pain of the children who had been abused and to the distress of the families of those children who had not. In relation to the medical profession, the report observed:

> One problem which beset the Inquiry and provided ammunition for cross-examination was the lack of agreed medical terms to describe the signs observed. In the charged atmosphere of the disputed hearings in the courts, differing uses of the same words are likely to confuse the medical and the legal professions. This problem was recognised by a number of witnesses who agreed that it was important to be careful to use consistent language and medical terms which might find acceptance from all sides. It is a topic which requires the urgent attention of the medical profession [11.6].

And

> Not only were there differences in the words used to describe what was seen, but we had the feeling that on some occasions at least, medical practitioners examining within a short period of each other either did not see or did not elicit the same clinical signs [11.7].

On the anal signs:

> there was clear difference of opinion about the interpretation of physical signs, there was also uncertainty as to whether the signs were present or not [11.29].

In the light of these observations it is not surprising that the Inquiry invited the medical profession to 'agree a consistent vocabulary', 'investigate the natural history', and 'to inquire into the phenomenon of anal abuse'. Agreeing a vocabulary is perhaps the easiest part of this.

Getting agreement on the interpretation of the signs was going to be far more difficult for a number of reasons. First, individual clinical experience, which in the absence of research data is all we have to guide us, is going to differ. Police surgeons or forensic physicians who are experienced in examining victims of alleged sexual assaults are bound to see a different spectrum of injuries to paediatricians who are usually asked to help with children who have been neglected or physically abused or in whom sexual abuse is thought to be a possibility but where no allegation has been made.

Second, information on the normal variations in the size and shape of the female genitalia during development or the functional reactions of the anal canal or the appearance of the anal verge is very limited. Whilst there are reports of the appearance of the female genitalia at birth, and some during late puberty, very little is known about the anatomical variations in the 3-month to 12-year age group. This may well reflect a natural reluctance to collect such information. In the past, the motives of the enquiring doctor might have been questioned; for example, why should anyone wish to know the structural changes to be found in the maturing hymen or the extent to which it might be distorted by itching or infections? If, as appears to be the case, such information may assist in the question as to whether the child has been subject to assault, then such studies should be made. Heger and her colleagues in the US are one group who are collecting such information and it should not be too long before we are far better informed.

It is even more surprising that so little is known about the physiology and pathophysiology of the anal canal. There is no doubt that in some children under some circumstances, the anal canal opens on buttock separation. The phenomenon is not in doubt. It is reasonable for lay people to expect the medical profession to be able to answer a number of simple questions in the light of this surprising event. Can some adults open their anal canal at will? If so, is it a natural skill or is it acquired? If it is acquired, how is it acquired? Might a child open the canal in anticipation of penetration after previous experience? If so, why have we, as a profession, not used such a reaction to observe the lining of the canal? Is it a learned reflex response? If it is a reflex, what is the reflex pathway? Is it a sign of disease or malfunction? If it is seen in a child does it imply loss of control? Does it require treatment? More specifically, is there substance in the occasional observation in texts on forensic medicine and rectal surgery, that in adults the opening of the anal canal on anticipation of rectal examination suggests experience of ano-receptive intercourse? There are no simple answers to these questions; if there had been they would have been presented to the Inquiry.

Third, until recently, the medical profession as a whole was barely aware of the possibility that children might be subject to penetrative sexual abuse from an early age. The victims of abuse may present to the medical profession in many ways: to the GP or paedia-

trician, with problems of bladder or bowel control; to the surgeons, with rectal or vaginal bleeds; to obstetricians, with vaginal discharge or teenage pregnancies; to A&E consultants, with perineal injuries; to the child psychiatrist with behaviour problems; and to the adult psychiatrist, with many symptoms of distress and unhappiness. The damage caused by the use of children for sex is still not given appropriate consideration in the student teaching programmes of these disciplines.

Now that there is a more general awareness, we should be able to collect more 'observational data'. However, what we really need are careful controlled studies. We know that perianal veins are seen in children who have been subject to anal abuse. We need to know if they also appear in otherwise normal children and if so at what ages and for how long. We need to know whether they occur in any abnormal state other than after anal penetration, and if so, how often and for how long. It may be that some of the signs will prove to be diagnostic but until we are confident that they are specific, they are of little value in reaching a decision as to whether a child has been abused or not. The fact that stretching the anal sphincter under anaesthesia does not produce a characteristic pattern of changes similar to that caused by anal penetration suggests that resistance to penetration plays a part in the pathogenesis.

Paradoxically, now that we know something of the extent of the problem, it has become more difficult to make detailed studies to establish the normal variations or to determine the natural history of any signs of injury. Questionnaires aimed at discovering whether a child has been subject to sexual abuse are unlikely to produce reliable answers and the process itself can be harmful to the child. The ethical constraints are considerable.

It was in response to the recommendation in the Cleveland Report, but well aware of the difficulties, that the Royal College of Physicians formed a Working Party of experts from many disciplines to look at such evidence as is available. Whilst there were paediatricians and police surgeons on the working party, the majority were neither, nor had most members been directly involved with the assessment of children subject to abuse. Their brief was to comment on the interpretation of the physical signs.

Their conclusions are given in this issue of the *Journal*. The full report, available from the College, not only reviews the evidence both in the literature and that presented to the Working Party by many experts, it also gives guidance on methods of examination, the collection of forensic evidence, and the definition of terms.

Many of the apparent contradictions in the literature, some of it published since the Inquiry, are due not so much to observer error as to the approach used to examine the child. The size of the hymenal orifice, or the dilatation of the anus on buttock separation may vary with the child's position, the technique used to demonstrate the hymen, the length of time a position is held and whether or not the child is able to relax. But there are other complicating factors such as the fear of pain or the presence of a full rectum. Thus, the report recommends that those preparing evidence for legal purposes do so by examining the child in a standard way.

Because of these uncertainties, both in eliciting signs and in their interpretation, it would be in the interests of the children and their families if the examination of children for evidence of abuse were not carried out by the inexperienced or occasional practitioner. It should also not be done by experienced doctors who because of time constraints or temperament, are unable to work with colleagues in other disciplines. The issues are too difficult and too important for a casual 'one off' approach. What action should be taken in the interests of the child can only be decided after a discussion with all involved, and the decision rests not with the doctor but with those who have a responsibility to protect the child.

Thus, in this area as in many others within medicine, doctors with special knowledge and experience are more likely to get it right. The report recommends that a small number of experts are identified within each health authority. Whoever they are—GPs, forensic physicians, paediatricians, obstetricians—they must be prepared to keep meticulous records, provide forensic samples where indicated, attend case conferences, present reports, and give evidence in court. The difficult question of obtaining informed consent to collect forensic evidence was raised but not answered.

It was to be expected that those involved in the exacting task of collecting evidence would look for new techniques to assist them. The colposcope allows the doctor to scrutinise the hymen and sometimes the lower vagina at a high magnification. Using this technique, more evidence consistent with abuse has come to light but, more importantly, the clear demonstration of a normal vascular pattern in the hymen has allowed confirmation of normality. Once again, there is a need to know what are the normal variations and what might be the result of diseases and disorders other than sexual abuse. Colposcopy is proving valuable in some clinics in the US. The Working Party did not recommend its routine use at the moment; when the studies under way in the US are complete, that decision will have to be reviewed. Colposcopy also allows photography at high magnification which could assist courts when matters are in question. Here again, it is necessary to adopt a standard technique.

The Working Party's primary concern was the interpretation of the physical signs of abuse. However, many children subject to sexual abuse do not show any physical signs at all. Even penetrative abuse into the vagina of 5-year-old girls or the anal canal of infant boys and girls may on occasions leave no physical sign. The absence of signs does not allow the doctor to con-

clude that abuse has not taken place. Similarly, the report concluded that, on the basis of information currently available, there are very few signs indeed which in themselves can lead a doctor to make a certain diagnosis of child sexual abuse.

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Summary and conclusions of the report on Physical Signs of Sexual Abuse in Children.

1. A substantial proportion of sexually abused children show no abnormal physical findings.
2. There are as yet insufficient data on the range and variation in appearances of the normal pre-pubertal male and female genitalia, based upon a population of children who have not been abused. Establishing that the children have not been abused raises ethical considerations which make such data difficult to obtain.
3. Physical findings are influenced by the examination techniques employed.

It is recommended that the female genitalia are normally examined in the supine frog-legged position, using labial separation and gentle labial traction to display the hymenal orifice. Some doctors experienced in the field have used in addition the knee-elbow position, which may yield additional information.

The anus is examined in the left lateral position with hips and knees well flexed. The buttocks are gently separated and the anal sphincter observed for 30 seconds.
4. There are a number of anatomical variations in the normal child, for example bumps or notches on the hymen, which may also appear in modified form in abuse.
5. Non-specific signs which occur in abused children may also be seen in non-abused children, for example inflammation, superficial fissures of the posterior fourchette and perineum, fusion of the labia minora and vaginal discharge. Poor hygiene and scratching are contributory factors.
6. The hymenal orifice dimension is not a reliable indicator of sexual abuse, although a horizontal diameter exceeding 1 cm in a pre-pubertal child occurs more commonly in abused girls. It is a feature which should arouse suspicion.
7. Very few signs are diagnostic of abuse in the absence of reasonable alternative explanation. These are a laceration or scar of the hymen, attenuation of the hymen with loss of hymenal tissue and a laceration or scar of the anal mucosa extending beyond the anal verge onto the perianal skin. Pregnancy in a child or young person under 16 years of age should raise the question of abuse.
8. There is a clear overlap between abused and non-abused populations with regard to physical signs which are consistent with and even suggestive of abuse. This is particularly so in the case of anal findings and reflex anal dilatation.

There is no doubt that a substational proportion of children subjected to anal abuse show dilation of the anal canal on buttock separation, while most non-abused children do not. However, reflex anal dilatation cannot by itself be regarded as an indication of abuse in the individual case, although it is a sign which supports a child's story of abuse.
9. Gross anal dilation which is persistent, reproducible and greater than 1.5 cm diameter is probably more significant than lesser degrees of dilatation.
10. The diagnosis of child sexual abuse is confirmed following a multi-disciplinary investigation with full inter-agency cooperation. Physical findings—including normality—are consistent with abuse and it is therefore important to document carefully even minor anogenital signs as well as negative findings. The single most important feature is a statement by the child. Detailed medical and forensic evidence may support this statement, as may a psychological assessment of the child or the confession by a perpetrator.

Physical signs alone are on rare occasions sufficient to make the diagnosis. The interpretation of physical findings is a matter for a doctor with experience in this field. A multi-disciplinary investigation with full inter-agency cooperation is necessary whenever there is concern that child sexual abuse has occurred.

The full report is available from the Royal College of Physicians, Price £10.00, Overseas £12.00. (For price of multiple copies, please enquire)