Approach to evaluation of sexual assault in children

Experience of a secondary-level regional pediatric sexual assault clinic

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ABSTRACT

OBJECTIVE To determine whether a 3-year-old girl, brought to an after-hours clinic because her mother was concerned, had been assaulted by her father during a weekend visit.

SOURCES OF INFORMATION MEDLINE was searched using the key words child, sexual assault/abuse, and expectations. Recent textbooks on childhood sexual assault and abuse were consulted. The secondary-level regional pediatric sexual assault clinic's experience over 1 year was reviewed. Articles in the literature generally provide level II evidence.

MAIN MESSAGE The literature review and the clinic's experience both indicated that specialty centres for child sexual assault and abuse rarely produce positive physical findings that conclusively confirm or rule out sexual assault, especially when children are asymptomatic and not in an acute state. Primary care practitioners can use a brief history and physical examination to decide on the next level of care and determine the urgency of referral. Urgent assessment of children thought to have been abused or assaulted is required when children disclose assault (especially with genital-genital contact or ejaculation); when children have acute pain, bleeding, or discharge; when results of a physician's examination are abnormal; or when parents are extremely distressed.

CONCLUSION Family physicians have a pivotal role in evaluation of childhood sexual assault or abuse. Knowledge of the outcomes of evaluation is crucial to understanding when and how to refer.

RÉSUMÉ

OBJECTIF Déterminer si une fillette de 3 ans qui vous est amenée par sa mère inquiète en dehors des heures habituelles a été agressée sexuellement par son père durant une visite de fin de semaine.

SOURCE DE L'INFORMATION On a fait une recherche dans Medline à l'aide des mots-clés *child, sexual assault/abuse,* et *abuse*. On a consulté les traités récents sur les agressions et sévices sexuels infantiles. On a fait le point sur l'expérience d'une année d'une clinique pédiatrique régionale de niveau secondaire pour agressions sexuelles infantiles.

PRINCIPAL MESSAGE La revue de littérature et l'expérience de la clinique s'accordent pour dire que les centres spécialisés en agressions et sévices sexuels infantiles produisent rarement des données physiques positives permettant de confirmer ou d'infirmer de façon concluante une agression sexuelle, notamment si l'enfant est asymptomatique et n'est plus en phase aiguë. Un historique et un examen sommaire permettront au médecin de première ligne de décider du prochain niveau de soin et de l'urgence d'y rediriger l'enfant. Il faut évaluer d'urgence les enfants soupçonnés d'avoir subi des sévices ou agressions sexuelles lorsqu'ils dénoncent ces agressions (notamment avec contact génito-génital ou éjaculation); lorsque les enfants présentent des douleurs aiguës, des saignements ou des écoulements; lorsque les résultats de l'examen du médecin sont anormaux; ou lorsque les parents sont extrêmement inquiets.

CONCLUSION Le médecin de famille joue un rôle de premier plan pour évaluer la possibilité de sévices ou d'agressions sexuels chez l'enfant. Une bonne connaissance des résultats de l'évaluation est essentielle pour savoir quand et comment rediriger l'enfant.

This article has been peer reviewed.
Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2005;51:1347-1351.

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Case scenario

A 3-year-old girl was referred to the Regional Paediatric Sexual Assault Clinic by a walk-in clinic physician. The child had returned from a weekend with her father and indicated to her mother at bath time that her bottom hurt. Her parents had been separated for about a year and were not on friendly terms. Her mother was sexually assaulted as a child. The walk-in clinic physician did not examine the girl because he thought he had no expertise in sexual assault.

The girl was referred to the sexual assault clinic for an urgent examination. It was late in the evening when she arrived; her mother was extremely upset and the girl quite irritable. Further history taking indicated that her mother had raised concerns earlier regarding her other children. No concerns to date had resulted in charges being laid, although both police and child protection services had investigated. The girl had had her bath and had changed into pajamas before arriving at the walk-in clinic.

A history from the mother yielded no further information. A physical examination by a pediatrician and a sexual-assault nurse had no positive (abnormal) physical findings. No further investigations were done. The child and mother were referred to Children's Aid workers, who would contact them in the morning to obtain additional history, and to the pediatric social worker on the team for support and counseling.

The pediatrician's report indicated there were no abnormal physical findings, but this did not rule out or confirm sexual abuse or assault. The mother was upset because she thought nothing was done at the centre to prove her husband had abused the girl. The child, by 2:30 AM, was fast asleep.

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This scenario is unfortunately common and highlights the discrepancy between parents' and referring physicians' expectations and the reality of outcomes at pediatric sexual assault centres. Knowledge of the usual outcome of such encounters might guide physicians to the next step in referral.

Sources of information

MEDLINE was searched from January 1966 to March 2004 using the key words child, sexual assault/abuse, and expectations. Textbooks on child sexual assault and abuse were consulted. The centre's experience during 1 year was used as background for the opinions expressed. In general, the literature offered level II evidence.

Prevalence

Child sexual abuse (usually by a family member) or assault (usually by a stranger) and sexual interference are common problems.[1] There are many definitions, one of which is "the involvement of dependent, developmentally immature children and adolescents in sexual activities that they do not fully comprehend, to which they are unable to give informed consent, or that violate the social taboos of family roles."[2]

According to a recent Canadian incidence study, 90% of children who had substantiated cases of maltreatment reported to Canadian welfare authorities showed no evidence of physical harm. Physical harm was found in less than 10% of sexually abused children and usually involved bruising or health conditions, such as sexually transmitted diseases.[3]

The physical signs of child maltreatment are often difficult to recognize and should not be our only indicators of maltreatment.[4] It appears also that physicians sometimes feel unprepared and have insufficient knowledge to deal with suspected child abuse or assault cases.[5,6]

Physical findings and the legal system

Erythema of the vulva is a common finding in young children and is, therefore, frequently seen

during examination for possible sexual abuse or assault. The most common causes of vulvitis in prepubertal children, however, are poor hygiene, irritation by soap or bubble baths, or infection with organisms from the respiratory tract.[7]

Bruising is common after accidental anogenital trauma and does not necessarily indicate abuse. Standardized terminology and photographic documentation have made comparisons in research more reliable. Even though most examination findings in cases of sexual abuse or assault are normal or nonspecific, positive medical findings continue to be the most important factor in criminal investigations.[8]

A review of adult victims of sexual assault in the United States found only 15% of cases were resolved with a legal outcome.[9] Emergency physicians have reported the need for accurate and detailed documentation of injuries in adult victims in order for legal action to proceed.[10,11] Family physicians have recognized that children who are sexually abused often have no physical signs, and they advise doing a careful examination and documenting disclosure of abuse.[12]

A classification of the findings of genital examination has been proposed.[13] Nonspecific findings are common in girls who have not been abused.[14,15] Factors that significantly correlated with abnormal genital findings in children who had suffered legally confirmed sexual abuse were the time of the last incident (ie, the shorter the time to examination, the higher the yield of information) and a history of blood at the time of the assault.[16]

Experience in Orillia

Our own centre serves a large geographic area in central Ontario that has five level-one community hospitals staffed by family physicians but no pediatricians. A review over 1 year (May 2002 to April 2003) identified 38 patients between 3 and 10 years old (average age 5.8 years).

Abuse was suspected because 28 children (74%) made disclosures or statements, one child (3%) had bleeding, four children (11%) had discharge, and the remaining 10 children (26%) exhibited worrying behaviour. Some children had more than one suspect factor. All these children were referred to the centre to confirm or rule out sexual abuse or assault.

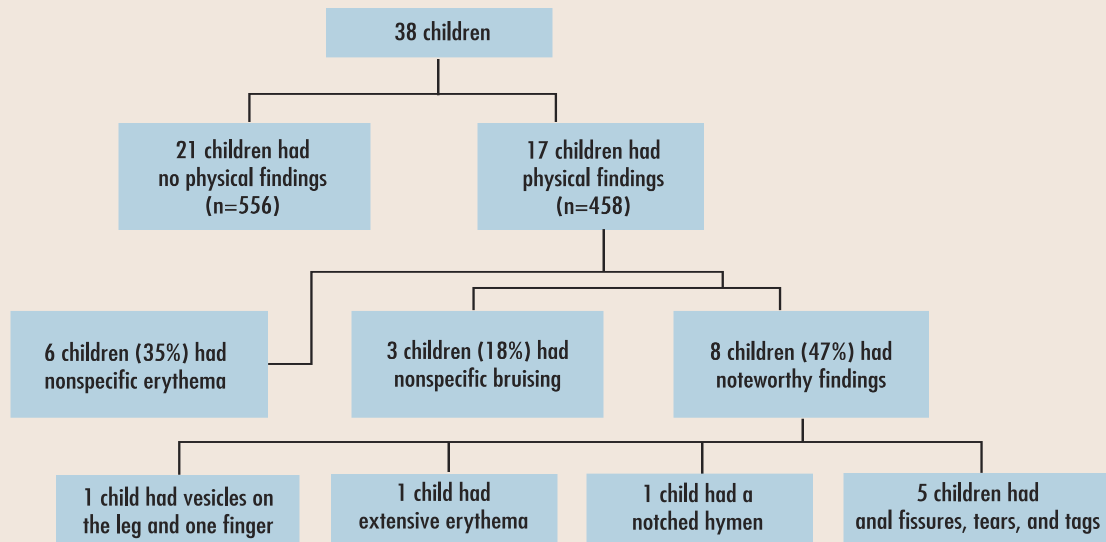
In 21 of these cases (55%), physical examination failed to reveal any findings consistent with physical trauma. In 17 cases (45%), there were physical findings. Among these cases, six children (35%) had nonspecific erythema of the vulvar area, and three other children (18%) had nonspecific bruising of the thigh and groin.

Of the 17 children with physical findings, eight (47%) had signs considered noteworthy by the examining pediatrician. (The average age of these children was 6.75 years.) Findings included extensive erythema of the vulvar area; scarring lesions on the back of the leg and an active vesicle on a finger; a hymen notched at 6 o'clock; a fragmented hymenal rim; and anal fissures, tears, and tags (five children) (**Figure 1**).

Cultures for sexually transmitted diseases were obtained from five children (29%) with positive physical findings. The only positive result was *Herpes simplex* virus, type 2, on the finger with a vesicle. Forensic swabs for DNA evidence were collected from three of the children (18%) with positive physical findings. None were positive for the purposes of evidence; one case is still pending trial. In the three cases in which forensic swabs were obtained, one 9-year-old child had extensive erythema of the vulvar area (forensic evidence is unknown, and trial is pending), one 8-year-old had erythema of the vulva (forensic evidence was negative, and there was deemed not enough evidence to support criminal charges), and one 10-year-old boy had an extensive anal tear (the perpetrator pleaded guilty so the forensic swabs were not used in evidence).

Of the 38 children referred to the clinic during the year, eight (21%) were found by the examining pediatrician to have noteworthy (yet predominantly nonspecific) physical findings. For three (8%) of the children (extensive erythema, digital type 2 herpes, and anal tear), urgent assessment was warranted, given the acuity of the findings. Although forensic swabs were obtained from three children (8%), to date, none have been an important factor in determination of sexual abuse in a judicial case.

Figure 1. Findings on physical examination



Is referral to a specialist centre necessary?

Many parents and referring physicians seem to see a visit to a sexual assault centre as a means of definitively establishing evidence of sexual abuse or assault. Our own statistics and reports in the literature indicate that physical examination rarely yields specific findings in nonacute, asymptomatic cases of possible sexual abuse or assault. Nonspecific findings of erythema and bruising were common at our centre and were considered nondiagnostic and not suspect. The examining physician considered findings noteworthy in 21% of referred cases. Only 8% of children were considered to require urgent assessment and care.

Urgent or immediate assessment of children with suspected abuse or assault can be supported in cases of disclosure of acute assault, especially under the conditions listed in **Table 1.** Only three children (8%) had forensic swabs taken, and none have been used in court. The paucity of convictions for sexual abuse or assault of children is related to many factors other than the lack of supporting medical and forensic evidence, including the difficulty of interviewing young children and interpreting their statements and young children's inability to testify in court.

Table 1. Reasons for immediate referral to a sexual assault centre

Disclosure of assault (especially genital-genital contact or ejaculation)
Symptoms of acute pain
Bleeding
Discharge
Abnormal results of physical examination

Case wrap-up

How then could our case have been handled differently? We can understand the dynamics involved with this child's family. The mother might have been sensitized to the issues of abuse based on her history. The parents' separation was unpleasant and could have generated a great deal of anger and mistrust. In cases of suspected acute child sexual abuse or assault, clothing and bed sheets provide the highest yield of forensic information.[17] Children should not be changed or bathed before seeing a physician.

The first physician to see this family could have visually inspected the perineum, ascertained when the last contact could have occurred, and decided whether the history was important. This does not mean conducting a detailed sexual assault interview (something that should be carried out only by experienced child protection workers or police investigators), but rather a discussion with parents regarding

the allegations. If nothing can be seen by an experienced family physician and the story is not associated with great trauma, it is unlikely that supportive evidence will be discovered at the centre.

In this case, the girl and her family need to see a team specialized in the area of sexual assault or abuse, but not on an urgent or emergency basis. The most important principles are that the child is safe, the family is supported, and the concerns are fully addressed. A visit to the sexual assault centre's nonurgent day clinic for evaluation, referral to a child protection agency for an in-depth interview, and follow-up support and counseling by the centre's pediatric social worker is most appropriate.

Based on our review, we now ensure that, during initial triage, nurses in our program discuss referring physicians' and parents' or caregivers' expectations of the program and define whether this is an urgent or routine clinic visit. Both nurses and pediatricians in the program routinely review with parents or caregivers the probability of finding evidence of injury during examination at the clinic.

EDITOR'S KEY POINTS

- Many family doctors are reluctant to examine children for suspected sexual abuse or assault because they think they lack expertise. They are especially reluctant if a specialized sexual assault team is available nearby.
- Examination by a specialist team rarely produces clear evidence to prove or disprove assault in nonacute, asymptomatic cases.
- Family physicians can be more selective about referral to sexual assault teams by sending only acute, symptomatic patients for urgent examinations. For nonacute, asymptomatic patients, routine clinic visits are appropriate.

POINTS DE REPÈRE DU RÉDACTEUR

- Plusieurs médecins de famille hésitent à examiner les enfants soupçonnés d'avoir subi des sévices ou agressions sexuels parce qu'ils croient manquer d'expertise. Ils sont particulièrement réticents lorsqu'il existe une équipe spécialisée en agressions sexuelles dans les environs.
- L'examen par une équipe spécialisée produit rarement des preuves convaincantes permettant de confirmer ou d'infirmer une agression dans les cas asymptomatiques non aigus.
- Le médecin de famille peut être plus sélectif en se limitant à demander une évaluation urgente par l'équipe spécialisée uniquement pour les enfants symptomatiques en phase aiguë. Dans les cas non aigus et asymptomatiques, la consultation habituelle suffit.

Conclusion

Primary care practitioners are pivotal to evaluation of child sexual assault and abuse. Family physicians can briefly explore the history of alleged interference, examine children for physical findings of abuse or assault, ascertain the probable time of the alleged assault, and then refer to the most appropriate and timely service to meet children's and families' needs.

Acknowledgment

We thank **Sylvia Naughton,** *Research Coordinator at the Orillia Soldiers' Memorial Hospital, for her assistance with this manuscript. We appreciate the support given by the Board and Administration of Orillia Soldiers' Memorial Hospital to research in this area. We are especially grateful to* **Dr Michelle Shouldice,** *Director of the Suspected Child Abuse and Neglect (SCAN) program at the Hospital for Sick Children in Toronto, for her careful review and sage advice regarding these issues.*

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