

Common Conditions That Mimic Findings of Sexual Abuse

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ABSTRACT

Sexual abuse is a problem of epidemic proportions in our society. Given the prevalence of sexual abuse, it is vital for medical providers, including pediatric nurse practitioners, to recognize sexual abuse in their patients and respond appropriately. Failing to recognize sexual abuse can leave children at risk for continued abuse and potentially lead to the sexual abuse of additional children. Serious ramifications also can arise when sexual abuse is diagnosed erroneously. Children can be removed from their homes and placed in foster care. An innocent person can be prosecuted. It is important for pediatric nurse practitioners to understand that the majority of children who are sexually abused will have a normal or nonspecific ano-genital examination. However, physical findings of sexual abuse are noted in approximately 4% of children who give a history of sexual abuse. Certain clinical findings can mimic sexual abuse. This article will discuss some of the more common findings mistaken for sexual abuse and assist the pediatric nurse practitioner in correctly recognizing these findings and responding appropriately. *J Pediatr Health Care.* (2009) 23, 283-288.

Key words: Sexual abuse mimickers

Sexual abuse is a problem of epidemic proportions in our society. The United States Department of Health and Human Services (2007) reports that 84,000 American children were substantiated by child protective services to be victims of sexual abuse in 2005. However, the majority of sexual abuse remains undetected. Retrospective studies of adults estimate that 20% to 25% of women and 5% to 15% of men were sexually abused as children (Berliner & Elliot, 2002).

Given the prevalence of sexual abuse, it is vital for medical providers, including pediatric nurse practitioners (PNPs), to recognize sexual abuse in their patients and respond appropriately. Failing to recognize sexual abuse can leave children at risk for continued abuse and potentially lead to the sexual abuse of additional children. Serious ramifications also can arise when sexual abuse is diagnosed erroneously: Children and families are exposed to emotional distress and upheaval, children can be removed from their homes and placed in foster care, and an innocent person could be prosecuted.

It is important for PNPs to understand that the majority of children who are sexually abused will have a normal or nonspecific ano-genital examination (Heger, Ticson, Velasquez, & Bernier, 2002). Physical findings diagnostic of sexual abuse are present in approximately 4% of children who give a history of sexual abuse (Heger, Ticson, Velasquez, & Bernier, 2002). A normal ano-genital examination does not mean that sexual abuse, including penetration, has not occurred.

The PNP who notes a finding on examination that is concerning for sexual abuse has an ethical, moral, and legal obligation to report his or her concern to child protective services. Ensuring the safety and well-being of the child is first and

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foremost. That being understood, the observation of a physical finding of sexual abuse in the absence of either a parental concern of sexual abuse or a verbal disclosure of sexual abuse by the child should lead the PNP to pause and consider common conditions that may mimic signs of sexual abuse. This article will discuss some of the more common findings mistaken for sexual abuse and assist the PNP in correctly recognizing these findings and responding appropriately.

Resources exist to assist primary care providers in making the diagnosis of sexual abuse. Child abuse specialists at pediatric hospitals or Child Advocacy Centers are available to provide advice and consultation to assist in diagnosing sexual abuse. Expert physical examination as well as expert forensic interviewing of children can be provided in these centers. Child Advocacy Centers provide multidisciplinary assessments that involve the teamwork of members of medical, mental health, child protective services, law enforcement, and prosecution services working together to ensure the safety of the child and link the family to needed resources. Although a primary care provider may not be in close proximity to a child abuse specialist, telephone consultation can be an invaluable resource to help in processing sexual abuse concerns with a medical provider who has experience in working with sexual abuse victims.

ANAL FISSURES

Anal fissures can mimic sexual abuse. An anal fissure is a discontinuity in the lining of the anus that can evolve in recovery, anal scars, or a sentinel distal tag (Bruni, 2003). Adams and colleagues (2007) describe anal fissures as a nonspecific finding of sexual abuse. The presence of an anal fissure without a history of sexual abuse or significant behavior changes, especially sexualized behaviors, does not warrant a concern or a report of suspected

sexual abuse. Anal fissures are commonly associated with constipation or passing large, hard stools. However, anal fissures in a child who is giving history of sexual abuse can be a finding that is concerning for sexual abuse and should be so documented and reported to child protective services.

ENLARGEMENT OF HYMENAL OPENING

It is not uncommon for parents/caretakers and even primary care providers to become concerned regarding the size of the hymenal ori-

leaving less than 1mm of hymenal tissue are concerning for sexual abuse yet very difficult for the unskilled medical examiner to accurately diagnose (Adams et al., 2007). Acute physical findings of sexual abuse generally involve genital or anal bruising, abrasion, and/or bleeding and are much easier to diagnose. However, nonacute findings are much more subtle and require more skill to recognize. Whenever the PNP or any primary care provider examines a child and has a concern that the hymen may be narrow, has a nonacute lacera-

The presence of an anal fissure without a history of sexual abuse or significant behavior changes, especially sexualized behaviors, does not warrant a concern or a report of suspected sexual abuse.

fice. A hymenal orifice may appear enlarged to the unskilled examiner and erroneously raise concerns of sexual abuse. The size of the hymenal opening will vary in the

tion, or has a nonacute deep notch, a referral to a Child Advocacy Center or child sexual abuse specialist for a second opinion examination would be appropriate. A prompt

More important than the size of the hymenal opening is the amount and intactness of hymenal tissue present in the posterior rim from 3 o'clock to 9 o'clock.

same child based on how relaxed the child is while being examined. Hymenal opening diameter measurement is not a reliable indicator of sexual abuse (Berenson et al., 2002; Ingram, Everett, & Ingram, 2001). More important than the size of the hymenal opening is the amount and intactness of hymenal tissue present in the posterior rim from 3 o'clock to 9 o'clock. Narrowing of the posterior hymenal rim (less than 1 mm), a laceration in posterior rim extending entirely through the hymen, and a deep notch in the hymen extending more than 50% through the hymen

(same day) examination would be optimal to ensure the safety of the child while confirming or eliminating the physical finding of sexual abuse.

FAILURE OF MIDLINE FUSION

Perineal failure of midline fusion can be misdiagnosed as sexual abuse. Failure of midline fusion occurs along the perineal midline between the vagina/scrotum and anus and results in a defect (Figure 1). Failure of midline fusion can result in mucosal exposure anywhere on a line from the fossa navicularis to anus (Heger, Ticson,

FIGURE 1. Failure of midline fusion, age 6 years. This figure can be viewed in color online at www.jpedhc.org.



Guerra, Lister, Zaragoza, McConnell, & Morahan, 2002). This finding is mesodermal and typically resolves at puberty. If a child gives a history of sexual abuse and the examiner notes a defect along the midline, a report should be made to child protective services (because of the history given). When an examiner notes a defect along the midline, especially in the absence of a stated history of sexual abuse, failure of midline fusion should be considered. A review of past medical records may describe the defect. Accurate documentation of the finding is important to avoid misdiagnosis of child sexual abuse. If the PNP is unsure regarding the defect, a referral to a Child Advocacy Center or child abuse specialist may be necessary. It also may be necessary to examine the child twice at 2-week intervals to note if the defect changes. A change in the defect in a 2-week period would indicate that it was not failure of midline fusion but rather an acute, possibly traumatic, defect.

LICHEN SCLEROSUS

Ano-genital lichen sclerosis can be mistaken for sexual abuse. Lichen sclerosis typically occurs in the fifth or sixth decades of life, but 10% to 15% of all cases occur in prepubertal children, with girls outnumbering boys 10 to 1 (Berth-Jones, Graham-Brown, & Burns,

FIGURE 2. Lichen sclerosis, age 8 years. This figure can be viewed in color online at www.jpedhc.org.



1991). Adolescents also can have lichen sclerosis; again, girls have it more frequently than do boys. Lichen sclerosis is a benign but chronic condition of the skin char-

Typical symptoms of ano-genital lichen sclerosis include itching, bleeding, and hemorrhagic blisters; hence the confusion with sexual abuse.

acterized by ivory or white shiny macules and papules that form hypopigmented plaques (Loening-Baucke, 1991) (Figure 2). A figure-eight pattern often is present encircling the vulva and anus. The hymen typically is spared. The skin becomes thin and fragile and may fissure, bruise, excoriate, and bleed easily. Purpura may be present. Typical symptoms of ano-genital lichen sclerosis include itching, bleeding, and hemorrhagic blisters; hence the confusion with sexual abuse. Lichen sclerosis can be associated with considerable dysuria and/or pain

on defecation, which can result in holding of urine and bowels leading to nocturnal enuresis, encopresis, and sleep disturbances. These behaviors can raise concerns for sexual abuse. Once observed, the presentation of lichen sclerosis is easily recognized but initially may be difficult to diagnose. Referral to dermatology or pediatric gynecology for confirmation of diagnosis and treatment is appropriate.

MOLLUSCUM CONTAGIOSUM

Molluscum contagiosum is a benign viral skin infection primarily affecting children or immune-compromised adults (Braue, Ross, Varigos, & Kelly, 2005). Molluscum contagiosum in the ano-genital area often is misdiagnosed as genital warts (human papilloma virus) and reported to child protective services as concerning for sexual abuse. Molluscum contagiosum in children is not related to sexual contact but is associated with swimming pool use, living in close proximity, skin to skin contact, sharing of fomites, and residence in tropical climates (Kyriakos, Palamaras, Ter-

zoudi, Emmanuelides, & Michailides, 2007). Molluscum contagiosum is characterized by small, single, or multiple umbilicated papules averaging 2 to 4 mm, containing a white, waxy core (Smith & Skelton, 2002) (Figure 3). Molluscum contagiosum often is self-limiting; if symptoms persist, referral to a dermatologist may be necessary. If the primary care provider is unsure if the presenting rash is molluscum contagiosum as opposed to ano-genital warts, a timely referral should be made to a Child Advocacy Center or Children's Hospital for a second opinion examination.

FIGURE 3. Umbilicated lesion of molluscum contagiosum, age 11 years. This figure can be viewed in color online at www.jpeds.org.



MONGOLIAN SPOTS

Mongolian spots are the most common form of birthmarks in newborns (Lee & Lim, 2003). They occur in 70% to 90% of African American, Asian, and Native American infants and in 5% to 13% of

raise the concern of sexual abuse. Perineal bruising without a clear history of accidental injury raises a strong concern of sexual abuse and should be reported to child protective services. PNPs questioning whether a lesion is

Mongolian spots are commonly mistaken for bruises, and when located in the perineal area, can raise the concern of sexual abuse.

White infants (Snow, 2005). Mongolian spots are gray or blue-gray areas found most commonly in the lumbosacral and buttock area but also can present in the perineal area. They can be solitary or multiple in number. Many Mongolian spots disappear by age 5 years, and most are gone by age 10 years (Nazarian, 1993).

Mongolian spots generally are large, nonblanching, hyperpigmented macules or patches (Snow, 2005). Mongolian spots are commonly mistaken for bruises, and when located in the perineal area, can

a bruise versus a Mongolian spot should consider a prompt referral to a Child Advocacy Center or other child abuse specialist for an expert opinion. Appointments at 2-week intervals may be necessary to note changes in the lesions, keeping in mind that Mongolian spots will not change in color or size in 2 weeks, whereas bruises will change. Bruises evolve as they heal through a spectrum of colors ranging from the red to the blue-black or purple hue of the fresh injury through the stages of hemosiderin

breakdown, leading to a yellow-green color (Nazarian, 1993).

NEVI

Nevi located in the perineal area, especially on the hymen, can be mistaken for bruising. Nevi tend to be brown/black in color even when present on the hymen. Bruises range in color along the red, blue, green, and brown spectrum. Hymenal bruising often will be accompanied by other signs of trauma such as edema, erythema, or bleeding. Hymenal or perineal bruising certainly raises a strong concern for sexual abuse and warrants a report to child protective services especially if there is no clear history of an accidental injury that would explain the bruising. However, if a PNP examines a child who has not given history of sexual abuse, notes a perineal or hymenal lesion, and is unsure if it is a nevus or a bruise, a prompt referral to a Child Advocacy Center or a Children's Hospital is most appropriate. It may be necessary for the child abuse specialist to see the child immediately and then repeat the examination in 2 weeks to differentiate between a bruise and a nevus. A bruise will disappear in 2 weeks, and a nevus will remain unchanged.

PERIANAL STREPTOCOCCAL DERMATITIS

Perianal streptococcal dermatitis is a superficial infection of the perianal area that can involve the external genital area (Lunghi, Finzi, & Frati, 2001). Most often it is caused by group A β -hemolytic streptococci. Symptoms usually are non-systemic and include various degrees of perianal erythema with mostly well-defined margins, perianal swelling, oozing/anal discharge, pruritus, pain, painful defecation, anal fissures, and blood on stools or anal bleeding (Herbst, 2003). Perianal streptococcal dermatitis can be mistaken for sexual abuse because of its associated symptoms. Diagnosis is made by bacterial culture of the affected area, optimally

from oozing areas. Treatment involves topical antibiotic treatment with mupirocin or erythromycin, or more frequently, oral penicillin V. Perianal streptococcal dermatitis is not sexually transmitted.

UNINTENTIONAL PERINEAL INJURY (STRADDLE INJURY)

Perineal trauma, including but not limited to hymenal injury, can result from sexual abuse. Therefore, when a child presents with a perineal injury, it is imperative to obtain a detailed history of the injury separately from both the accompanying parent/adult and the child, if developmentally appropriate. Remember that trauma to the ano-genital region also can result from unintentional injury. Nonintentional perineal injury generally results when a child, during normal activity such as bicycle riding,

inconsistent with physical findings. The primary care provider should obtain a detailed history of the injury and, if the injury is inconsistent with the history given, a report must be made to child protective services. However, if the primary care provider is unsure whether the history is consistent with the injury, a prompt (same day) referral should be made for a second opinion examination at a Child Advocacy Center or Children's Hospital. If the second opinion examination cannot be completed promptly and the primary care provider questions the possibility of sexual abuse, a referral should be made to child protective services.

URETHRAL PROLAPSE

Urethral prolapse often presents with vaginal bleeding and swelling and thus may be misdiagnosed as sexual abuse. Urethral prolapse

FIGURE 4. Urethral prolapse, age 5 years. This figure can be viewed in color online at www.jpedhc.org.



managed by sitz baths and estrogen cream; if symptoms are severe or persist, referral to a urologist may be necessary.

URINARY TRACT INFECTIONS

Urinary tract infections can be mistaken for sexual abuse because of accompanying symptoms. Symptoms that can mimic sexual abuse include dysuria, foul-smelling urine, genital erythema/irritation, and bleeding (McGillivray, Mok, Mulrooney, & Kramer, 2005). A child who presents with these symptoms should have a urinalysis and urine culture completed to determine if a urinary tract infection is indeed present. If the culture is positive for a urinary tract infection and there is no stated concern of sexual abuse, the child need not be further assessed for sexual abuse.

VAGINAL FOREIGN BODY

A foreign body in the vagina, often toilet tissue, can result in vaginal discharge and bleeding, which can be mistaken for sexual abuse. An essential aspect of physical assessment when a child presents with a history of vaginal discharge and/or bleeding is a thorough examination of the external genitalia. Utilizing labial traction and separation to provide opening of the hymen should allow visualization of

Urethral prolapse often presents with vaginal bleeding and swelling and thus may be misdiagnosed as sexual abuse.

climbing, or other play, falls and straddles an object, thereby striking and injuring the uro-genital or anal area (Dowd, Fitzmaurice, Knapp, & Mooney, 1994). The majority of straddle injuries are minor. Most straddle injuries spare the hymen and vagina, resulting in injury to the labia majora and/or minora or posterior fourchette (Bond, Dowd, Landsman, & Rimsza, 1995). Hymenal and/or vaginal injury results from a penetrating mechanism that can be intentional or unintentional. Factors that increase concern of possible sexual abuse include no history of injury; infant younger than 9 months of age or nonambulatory; perineal, vaginal, or hymenal injury without history of penetrating trauma; extensive or severe trauma; presence of non-urogenital trauma; or history

typically occurs in young Black girls, between the ages of 4 and 8 years, and menopausal White women (Lang, Darwish, & Long, 2005). Urethral prolapse occurs when the urethra mucosa evaginates beyond the urethra meatus, resulting in vascular congestion and edema of the prolapsed tissue (Shurtleff & Barone, 2002) (Figure 4). Factors contributing to urethral prolapse include estrogen deficiency, large weight for age, trauma, urinary tract infection, and anatomical defects. The presence of vaginal bleeding in a child appropriately raises the concern of sexual abuse. However, in a child who presents with vaginal bleeding, gives no history of sexual abuse, and has a urethral prolapse, sexual abuse is not a concern. Urethral prolapse can be medically

the foreign body. If the child is able to cooperate, a foreign body may be removed in the outpatient setting by gentle irrigation of the vagina with saline solution or water with the child in the supine position (Emans, Laufer & Goldstein, 2005). Referral to pediatric gynecology or surgery may be necessary for removal of the foreign body if irrigation is unsuccessful.

Repeated purposeful insertion of objects into the vagina by the child raises a concern of possible sexual abuse, which requires a sexual abuse assessment (forensic interview and ano-genital examination by a skilled child abuse provider). Referral to a Child Advocacy Center or child abuse program at a children's hospital would be appropriate or, if unavailable, child protective services should be notified.

It is vital for PNP's and other primary care providers to correctly recognize physical findings/symptoms of sexual abuse in their patients. Child Advocacy Centers and child abuse specialists at children's hospitals can be an invaluable consultative resource to provide guidance in management of the patient concern, a second opinion physical examination, or perhaps most importantly, a child sexual abuse interview by a skilled interviewer. When a question arises regarding sexual abuse, the primary care provider should never hesitate to obtain an expert opinion. Primary care providers must remember that, as mandated reporters, if they have a concern of sexual abuse, they are obligated by law to report their concerns to child protective services and law enforcement. The diagnosis of child sexual abuse should be made whenever a child gives a history of sexual abuse or has an examination finding that is concerning for sexual abuse. It is im-

portant for the primary care provider to realize that although physical findings of sexual abuse are rare, they do exist. Recognizing common conditions that may mimic signs of sexual abuse can assist in accurate diagnosis and reporting of sexual abuse. Primary care providers, including PNP's, play an essential role in the protection of children from child sexual abuse.

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