Gonorrhea in Prepubertal Children

ABSTRACT. This statement updates a 1983 statement on this topic and reminds physicians that sexual abuse should be strongly considered when a gonorrheal infection is diagnosed in a child after the newborn period and before the onset of puberty.

Sexual abuse should be strongly considered when a gonorrheal infection (ie, genital, rectal, oral, or ophthalmologic) is diagnosed in a child after the newborn period and before the onset of puberty. A sexually transmitted disease may be the only physical evidence of sexual abuse in some cases.1 Sexually abused children may deny that abuse has occurred. The Centers for Disease Control and Prevention provides the following guideline: “The identification of a sexually transmissible agent from a child beyond the neonatal period suggests sexual abuse.”2 This statement does not address gonorrheal infection in adolescents, which may result from sexual abuse or consensual sexual activity. The Committee on Adolescence statement on sexually transmitted diseases provides additional guidance for the pediatrician evaluating adolescents.3

EPIDEMIOLOGIC FACTORS

The risk of acquiring sexually transmitted diseases as a result of sexual abuse during childhood is unknown. Reported rates of gonococcal infection range from 3% to 20% among sexually abused children.4,5 The incidence of Neisseria gonorrhoeae in a given population of children who may have been sexually abused is determined by the type and frequency of sexual contact, the age of the child, the regional prevalence of sexually transmitted diseases in the adult population, and the number of children referred for evaluation of possible sexual abuse.6 The presence of N gonorrhoeae infection in a child is diagnostic of abuse with very rare exception.7

CLINICAL FINDINGS

A gonococcal infection may be diagnosed in the course of an evaluation of a medical condition such as conjunctivitis, in which no suspicion of abuse existed, or it may be diagnosed during an assessment for possible sexual abuse. In the prepubertal child, gonococcal infection usually occurs in the lower genital tract, and vaginitis is the most common clinical manifestation. Pelvic inflammatory disease and perihepatitis can occur, but are uncommon. Infections of the throat and rectum typically are asymptomatic and may go unrecognized. If no source of the infection is identified, a conclusion that the transmission was perinatal or nonsexual in nature is unacceptable.

LABORATORY FINDINGS

Laboratory confirmation of N gonorrhoeae is essential before sexual abuse is reported to the local child protective services agency solely on the basis of a positive Neisseria culture. However, an immediate report should be made if other compelling indicators of abuse are evident. A carefully structured laboratory protocol must be used to ensure identification of the organism.7 An accurate diagnosis of gonococcal infection can be made only by using Thayer–Martin or chocolate blood agar-based media. Positive cultures must be confirmed by two of the following methods: carbohydrate utilization, direct fluorescent antibody testing, or enzyme substrate testing.1,8,9 A culture reported as N gonorrhoeae from the pharynx of young children can be problematic because of the high number of nonpathogenic Neisseria species found at this site. To prevent an unwarranted child abuse investigation, confirmatory tests must be performed to differentiate N gonorrhoeae from organisms such as Neisseria meningitidis, Neisseria lactamica, and Neisseria cinerea that may be normal flora.9 Currently, the use of nonculture methods (ie, DNA probes or enzyme-linked immunosorbent assay) for the documentation of N gonorrhoeae is investigational. If a nonculture method is used, a positive result must be confirmed by culture. No current data are available for the pediatric population, but studies of adults have shown a significant incidence of false-positive indirect tests compared with the incidence obtained by culture methods.10,11

By law, all known cases of gonorrhea in children must be reported to the local health department. A report also should be made to a child protective services agency. An investigation should be conducted to determine whether other children in the same environment who may be victims of sexual abuse are also infected. A child in whom a culture is positive for N gonorrhoeae should be examined for the presence of other sexually transmitted diseases such as syphilis, chlamydia infection, hepatitis B, and human immunodeficiency virus infection.
REFERENCES

Gonorrhea in Prepubertal Children
Committee on Child Abuse and Neglect

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