

Role of the Pediatrician in Management of Sexually Transmitted Diseases in Children and Adolescents

Approximately half of all American adolescents have experienced sexual intercourse by age 17 years.¹ The second highest rate of reported gonococcal infections (1,229 cases per 100,000 persons) occurs in 15- to 19-year-old adolescents. This increased risk in the adolescent population has been associated with the greater number of young people having sexual intercourse, the infrequent use of barrier contraceptive methods, the obstacles to prompt medical care that teenagers face, with consequent delay in diagnosis and further spread of the disease, and the large number of asymptomatic carriers.²

The pediatrician has an important responsibility for providing sexuality-related care to children and adolescents.²⁻⁴ Screening for sexually transmitted diseases should be a part of that care both to prevent the serious complications of these illnesses and to control their spread. Pelvic inflammatory disease, one of the most serious complications of sexually transmitted diseases, is responsible for causing sterility in an estimated 75,000 girls and women each year.⁵ Permanent reproductive tract damage may occur in boys and men who have repeated or untreated chlamydial or gonococcal infections.

DETECTION

Elements of the medical history, the physical examination, and the laboratory evaluation each contribute to the screening for sexually transmitted diseases.

Medical History

The screening medical history should be per-

formed in a setting where privacy and confidentiality can be assured. Information regarding sexuality obtained from an adolescent whose parent is not present is more likely to be accurate. The history should include information about age at initiation of coitus, frequency of coitus, other sexually intimate behaviors, exposure to sexually transmitted diseases, prior treatment for sexually transmitted diseases, the use of barrier contraceptives, and symptoms that may be indicative of a sexually transmitted disease. The finding of symptoms such as dysuria, discharge, and genital pain or ulcers mandates further evaluation for a possible sexually transmitted disease.²

Physical Examination

The screening physical examination for sexually transmitted diseases must include attention to both genital and extragenital areas. Extragenital skin lesions, inflammatory changes of the throat, joints, or anorectal area, and abdominal tenderness are among the most common nongenital physical findings associated with sexually transmitted diseases. Ulcerations or warts of the genital area are more specific indications of a sexually transmitted disease.

A pelvic examination is mandatory in the female adolescent who complains of vaginal discharge, abnormal bleeding, or pain in the lower abdomen or in the girl who gives a history of exposure to an infected partner. The decision to obtain parental consent for a pelvic examination is an individual one but is almost never a legal necessity when a sexually transmitted disease is suspected. The perianal area should be included in the examination.

The male genital examination should include inspection of the external genitals, including an inspection of the meatus, retraction of the foreskin, and an attempt to express discharge from the urethra. The scrotum and inguinal and femoral areas

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should be carefully palpated. A prostatic examination may also be indicated. Inspection of the perianal area should be included.

Laboratory Evaluation

Microscopic examination of a vaginal or urethral discharge can provide both confirmation of the presence of a sexually transmitted disease and, at times, a prompt and accurate diagnosis. A saline preparation, representing a suspension of discharge in a few drops of normal saline, will allow for the microscopic identification of *Trichomonas vaginalis* (a pear-shaped motile organism with characteristic anterior flagella) and bacterial vaginitis (*Gardnerella/Haemophilus vaginalis*) identified by the presence of "clue cells," ie, epithelial cells covered by coccobacilli.

Gram-negative intracellular diplococci found on a Gram stain usually indicate infection with *Neisseria gonorrhoeae*. Because the Gram stain has limited reliability in the woman, culture for *N gonorrhoeae* is essential. Papanicolaou smears, although not as rapid a diagnostic tool as either the saline preparation or the Gram stain, can be useful in identifying trichomonads and may show cellular changes characteristic of herpes or genital warts.

Culture techniques are readily available in the majority of hospital and commercial laboratories for the isolation of most bacterial pathogens that cause sexually transmitted diseases. In addition, both viral and chlamydial cultures are now available in many laboratories and results can be supplied within 1 to 3 weeks. Although syphilis is currently uncommon in teenagers, periodic serologic screening for this disease should be considered in all sexually active adolescents. In addition, a variety of microimmunologic techniques are now used for the identification of infections with *Chlamydia trachomatis*, herpes simplex virus, and *N gonorrhoeae*.

SPECIAL CONSIDERATIONS

Centers for Disease Control Guidelines

The "Sexually Transmitted Diseases Treatment Guidelines"⁶ is considered the current standard source of recommendations for the therapeutic management of sexually transmitted diseases. (A copy of these guidelines can be obtained by writing to the Centers for Disease Control.) In general, whenever possible, treatment of the adolescent with a confirmed or suspected sexually transmitted disease should begin on-site at the time of the initial visit because compliance with therapeutic regimens cannot always be assured. At times, however, the

initiation of treatment may need to be deferred until laboratory confirmation of a diagnosis.

Legal Considerations

Gonorrhea and syphilis are currently the only sexually transmitted diseases that must be reported to public health services in all states, although local ordinances may include more extensive reporting requirements. In addition, all states now have public health statutes that allow minors to give consent for their own evaluation and treatment for sexually transmitted diseases. All physicians should be aware of their state's regulations that protect the adolescent patients' rights to privacy, confidentiality, and health care.

Treatment of Sexual Partners

The sexual partners of adolescents found to have sexually transmitted diseases should also be treated. The adolescent and the physician should jointly determine the most sensitive and effective manner in which to notify the partner and assure his or her treatment. It is best if the physician offers to treat the partner as well so as to minimize the obstacles that often interfere with an adolescent's seeking medical attention for a sexually transmitted disease. Although less desirable, treatment of the partner may sometimes be accomplished by forwarding a prescription with the patient.

Education

Education regarding the prevention, diagnosis, and treatment of sexually transmitted diseases is central to the management of the sexually active adolescent. An annotated guide to low-cost publications suitable for teenagers and young adults is available from the AAP.⁷

MISCELLANEOUS CONSIDERATIONS

Sexual Abuse

The identification of a sexually transmitted disease in a prepubertal child should alert the physician to the probability of sexual abuse. Although nonsexual human transmission, beyond the newborn period, has been reported for herpes simplex virus, syphilis, and granuloma inguinale,² the detection of any sexually transmitted disease in a child should raise sufficient suspicion of abuse to warrant a report to a child protective agency. The detection of a sexually transmitted disease in a child should prompt the physician to screen for other common sexually transmitted diseases and to examine for signs of abuse.

Sexual Assault

Any adolescent seen with a history of a recent sexual assault should be evaluated for sexually transmitted diseases. The evaluation should include cultures for *N gonorrhoeae* and *C trachomatis*, as well as a serologic test for syphilis. A pelvic examination should be performed and any discharge or secretions should be examined microscopically. Both genital and anorectal examination and laboratory evaluations should be performed on male victims of sexual assault. The management of medicolegal aspects of sexual assault, potential pregnancy, and physical and psychologic trauma is also an integral part of the care of these young people.⁸ It should be noted that juvenile prostitutes and "runaways" represent groups at particularly high risk for sexual assault, as well as sexually transmitted diseases from consensual sexual relationships.

Acquired Immunodeficiency Syndrome (AIDS)

The full clinical spectrum of AIDS is currently being defined, although it is already clear that groups at high risk include homosexual men, intravenous drug users, and hemophiliacs who have received multiple blood transfusions.⁹ A thorough history should include questions related to sexual preference as well as drug use behavior. Such information may alert the physician to the need to investigate for the possibility of AIDS and related syndromes.

CONCLUSIONS

The 1972 statement on venereal disease¹⁰ served to initiate what is now the well-established necessity for the involvement of the pediatrician in issues of childhood and adolescent sexuality. The Committee has since presented position papers on contraception, pregnancy, and rape.^{3,4,8} However, sexually transmitted diseases remain a critical reproductive health concern to pediatricians, particularly, but not exclusively, as they relate to care of teenagers. The pediatrician must play a primary role in the prevention, diagnosis, and treatment of

sexually transmitted diseases. Reduction in the prevalence of these diseases and their complications remains a public health goal in which all pediatricians should participate.

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