Urine Testing for Drugs of Abuse

A Survey of Suburban Parent-Adolescent Dyads

Richard H. Schwartz, MD; Tomas J. Silber, MD; Richard B. Heyman, MD; Michael J. Sheridan, ScD; Dawn M. Estabrook, MD

Background: The American Academy of Pediatrics is opposed to involuntary diagnostic testing for drugs of abuse.

Objective: To gather data about attitudes of parents and their teenagers about involuntary drug testing on parental request.

Design: Adolescents and their accompanying parents separately answered a printed survey in the offices of their private pediatrician. The survey posed 2 hypothetical questions about urine testing: (1) Do parents have the right to ask a teenager’s physician to order a urine test for drugs of abuse without the teenager’s knowledge—if the teenager has falling school grades, an uncooperative attitude, and major untruthfulness? (2) In such a case, should the teenager’s physician obtain a urine test for drugs on parental request only, without the teenager’s consent?

Results: A total of 393 paired evaluable surveys were collected: 77.6% from Virginia and 22.4% from Ohio. There were no significant differences in answers between the 2 study sites. Of the students, 85.8% had either an A or a B grade point average. Current marijuana use was unusually low in our teenaged respondents. Of the parents surveyed, 81.7% would want a physician to be able to perform a urine test for drugs of abuse for a problematic teenager without the young person’s consent. The answers to the 2 questions about urine drug tests had poor κ coefficients of agreement between teenagers and parents (0.04 and 0.09, respectively). Reanalysis, using the variables of age, grade point average, and frequency of marijuana smoking, showed little difference in agreement scores.

Conclusions: In the 2 suburban pediatric practices surveyed, parental opinions and expectations were at variance with the American Academy of Pediatrics policy statement on nonconsensual urine drug testing in the presence of clinical problems. Pediatricians need to be conscious of this clinical-ethical dilemma, become familiar with the American Academy of Pediatrics policy on drug testing, and develop their own position and expertise in this area. The dyad method (parent-teenager survey) is novel and improved the methodology of our study. We surveyed middle-class suburban adolescents while previous studies of adolescents surveyed inner-city populations.

Arch Pediatr Adolesc Med. 2003;157:158-161
without the adolescent’s consent. A similar statement was published earlier by the AAP Committee on Bioethics.3

In some situations, a parent requests a urine drug test for his or her teenager without the adolescent’s voluntary knowledge or consent.4,5 Sometimes the parent is concerned because the teenager has been exceptionally moody. In other cases, the parent has seen a program on television about adolescent drug use that has raised his or her level of suspicion. More often, requesting parents have found drugs or paraphernalia in the teenager’s bedroom, were alerted by a neighbor, or teacher about the possibility that their teenager might be using drugs, or have had increasing concerns about their teenager’s oppositional or antisocial behaviors. This is often accompanied by deterioration in pride in handing in carefully done school work, combined with a worsening scholastic performance.

Under such circumstances, parents may be understandably anxious and upset. They generally trust that their teenager’s physician will detect diseases, including drug abuse, and that they would be informed of this finding. Conversely, an adolescent patient may become irate and feel betrayed should a physician order nonconsensual urine drug tests. To learn more about this issue, a survey study was designed to assess parent-adolescent dyads about the parent’s right to request urine drug tests for a hypothetical teenager with marked behavioral and scholastic problems and the pediatrician’s right to order such tests without the teenager’s consent.

STUDY POPULATION AND DESIGN

We developed a 24-item multiple-choice survey instrument that included questions about the adolescent’s age, sex, grade point average (GPA), and lifetime and current marijuana use and the parents’ marital status. Identical questions concerning hypothetical issues and personal drug use history were asked of teenagers and accompanying parents. The possible multiple-choice answers were the same on the teenager and parent surveys. The respective teenager-parent survey was given to consecutive parent-teenager pairs in a suburban Virginia location and to parent-teenager pairs in a private group pediatric office in Ohio, as time permitted. In that office, there was no attempt to enroll consecutive parent-teenager dyads about the parent’s right to request urine drug tests for a hypothetical teenager with marked behavioral and scholastic problems and the pediatrician’s right to order such tests without the teenager’s consent.

STATISTICAL ANALYSES

All survey responses were categorical. Differences in proportions were calculated using the χ² statistic. To measure agreement, a specific form of association between parents and their teenagers, simple κ coefficients, and 95% confidence intervals were calculated according to the method of Cohen. For this study, κ values of 0.00 to 0.39 indicated no to slight agreement; 0.40 to 0.79, moderate agreement; and 0.80 and greater, excellent agreement. To assess for any trend in responses of teenagers according to age, the Cochran-Armitage test result was calculated. If the count in any cell of a contingency table decreased below 5, exact measures were calculated. A type I level error of α = .05 was considered statistically significant.

RESULTS

Completed surveys were collected from 393 adolescent-parent pairs, 305 (77.6%) from the Virginia site and 88 (22.4%) from the Ohio site. A question-by-question comparison of answers to demographic and drug-related questions revealed only minor differences in responses from the 2 study sites. Therefore, data from the 2 sites were combined. Of the 393 teenagers, 203 (51.7%) were male and 190 (48.3%) were female. Also, 244 (62.1%) were aged 13 to 15 years, 116 (29.5%) were aged 16 to 17 years, and 33 (8.4%) were aged 18 to 19 years. Of the teenagers, 329
(83.7%) lived with both parents, 32 (8.1%) lived with one parent, and 32 (8.1%) described their living situation as other (percentages do not total 100 because of rounding). Also, 150 (38.2%) of the subjects had a GPA of A, 187 (47.6%) had a GPA of B, 46 (11.7%) had a GPA of C, and 10 (2.5%) had a GPA of D. The respondents were predominantly middle-class college-bound teenagers and their parents. From previous surveys, we knew that most of the parents in the Virginia practice were college graduates who were employed as professionals, administrators, computer experts, supervisors, or government employees. Of the 393 teenagers, 41 (10.4%) admitted to having smoked marijuana at least once while 23 (5.9%) admitted to having done so in the previous month ("current marijuana use"). Of the 393 parent responders, 105 (26.7%) reported smoking marijuana at least 10 times during their teenage years, but none admitted current marijuana use. We did not inquire about use of other illicit drugs.

Of the 393 parents-teenagers, 321 (81.7%) of all parents vs 211 (53.7%) of all teenagers believed that a parent had the right to ask the physician to order a nonconsensual urine test for drugs of abuse for a problematic teenager without the teenager's knowledge or consent. Forty-two (10.7%) of the parents vs 121 (30.8%) of the teenagers said the parent had no such right. The remainder of both groups (30 [7.6%] of the parents and 61 [15.5%] of the teenagers) were undecided. When a more specific form of association (κ coefficient) was used to examine the agreement in responses between parents and their teenage children, poor agreement was found (κ, 0.04; 95% confidence interval, −0.02 to 0.11). Fifty-nine (35.5%) of 166 teenagers aged 13 to 15 years, 35 (43.2%) of 81 teenagers aged 16 to 17 years, and 9 (34.6%) of 26 teenagers aged 18 to 19 years answered no to this scenario when their parents answered yes. While we expected the percentage of teenagers answering no when their parents answered yes might increase with increasing age, no discernible trend was found (P = .67).

Of the 393 parents-teenagers, 315 (80.2%) of all parents vs 224 (57.0%) of all teenagers agreed that a physician had the right to order a nonconsensual urine test for a teenager with interpersonal, behavioral, and academic problems. Significantly more parents than teenagers (57.0% vs 28.0%; χ² = 67.7, P < .001) believed that a physician had the right to order such a nonconsensual urine test. When a more specific form of association (κ coefficient) was used to examine the agreement in responses between parents and their teenage children, poor agreement was found (κ, 0.09; 95% confidence interval, 0.03-0.15). The trend for increasing teenager disagreement with increasing teenager age was not significant (P = .16). For both scenarios, controlling for GPA and affirmative answers to questions about current or lifetime teenage use of marijuana had no significant effect on agreement scores.

**COMMENT**

Screening for substance use certainly raises ethical issues for the practicing pediatrician. Ethical concerns relating to screening involve issues of informed consent, confidentiality, and civil rights. The AAP has a long history of contribution to this area. Throughout its history, the AAP consistently asserts that parental permission is insufficient for involuntary screening of the competent adolescent. However, it also concedes that consent may be waived when there is reason to doubt competency, when the medical assessment suggests a high risk of serious damage due to substance use, or when there are legal reasons. In reflecting on the AAP position, it is of interest to review the ideas of other contributions to this issue. The American Academy of Child and Adolescent Psychiatry agrees that an adolescent patient should be given the right of informed consent to alcohol and other drug treatment, but qualifies it by adding: "It may be appropriate, however, to obtain informed consent for testing from the parents alone, when the minor patient exhibits poor judgement, cannot make a positive treatment alliance, is dangerous to himself or herself or to others, does not show concern for his or her condition, and/or refuses help." Dupont extends this indication by claiming: "The standard against which all counselor's actions should be judged is the teenager's best long-term interests." Neveloff Dubler and Quinn also support a balanced approach, stating clearly that a physician is never forbidden by law or by the application of ethical principles from sharing information with the parent under circumstances in which the patient is in danger to himself or herself. Finally, completing the spectrum of views, King and Cross consider screening for drugs to be unethical except when the patient accepts it freely or there are strong clinical reasons for the request. The AAP guidelines, and the different thoughts expressed, need to be considered by each practicing physician according to the teenager's age and level of maturity.

Our study asked 2 variations on one question. Is it acceptable for parents or physicians to request a drug test on urine obtained without consent from a teenager exhibiting symptoms consistent with drug use? As a result of our experience with this survey and the finding of divergent perspectives between parents and their adolescent children, we propose that it is important to discuss the ethics issues involved in urine screening and search for common ground. The following considerations may provide a starting point.

1. Screening for drugs of abuse during adolescence must be scientifically sound.
2. There should be a clinical basis for requesting it.
3. Physicians need to respectfully share the rationale for or against screening with patients and parents and help them through the process. The AAP guidelines may serve as a background.
The AAP is opposed to involuntary testing of adolescents for drug use, regardless of parental consent for such testing. Such testing is viewed as violating the confidentiality of the adolescent.

This survey of middle-class suburban teenagers and their parents found that 82% of parents would want a physician to be able to perform a urine test for drugs without the adolescent’s consent if the parents were concerned about drug use. There was little agreement between teenagers and parents on attitudes toward testing.

4. Screening should be part of a comprehensive therapeutic plan.

The findings of this report are subject to several limitations. The adolescents studied were from middle- to upper-middle-class high-achieving families. Their academic standing was well above average. Lifetime and current marijuana use reported by teens was less than the average reported for high school students nationally. Results may not reflect the responses of teenagers from other geographic regions and socioeconomic groups or from teenagers who are experiencing academic failure. Responses of the teenagers in our study do not represent the views of selected at-risk teenagers, such as those in foster care, homeless youth, or those involved with the juvenile justice system. Although some of us who are primary care pediatricians (R.H.S., R.B.H., and D.M.E.) have extra qualifications in adolescent drug abuse, none of the survey participants had specifically sought us out because of our expertise or management techniques in this area. An estimated 15% of survey respondents, typically older teenagers who drove to the office unaccompanied by a parent, took the parent survey home for a parent to complete. We have no knowledge of who (parent or teenager) actually completed the parent questionnaire once it left our office.

Alcohol, LSD (lysergic acid diethylamide), inhalants, nicotine, and ecstasy will not be detected in most routine drug screens. They require special laboratory tests. Positive urine test results for drugs of abuse provide objective evidence of recent use of marijuana and/or cocaine because the false-positive rate is less than 3% for those drugs. These drugs can usually be detected for 2 to 3 days after use. Because of the long half-life of marijuana metabolites, test results from long-term daily marijuana users may be positive for several weeks after last use, but remain positive only for a few days after infrequent use. A positive test result for amphetamines or opiates is more difficult to interpret because several over-the-counter decongestant medicines can produce a positive test result for amphetamines and the ingestion of poppy seed–containing breads or pastries can produce a positive test result for opiates. Experienced drug users often have lots of tricks to adulterate or dilute urine specimens or to substitute “clean” urine specimens obtained from trusted sources. Therefore, parents should be wary of negative results of urine drug tests and should use caution in interpreting positive results for amphetamines or opiates.

Despite these limitations, our survey has potentially important implications. Our results show a poor correlation between the opinions of parents and their teenagers on the issue of how a physician should respond to a parental request for nonconsensual urine tests for drugs of abuse when a teenager is having serious problems. This subject should make for interesting parent-teenager discussions about alcohol and other drug use, optimally before substance use occurs.

In the population surveyed, more than 4 of 5 of the parent respondents believed that they had the right to request involuntary nonconsensual urine drug tests if a hypothetical teenager had deteriorating school grades, a noncooperative attitude, and major untruthfulness. There was a significant disparity between the expectations of middle-class parents, their teenaged children, and the AAP policy statement on urine drug testing. The gap between the AAP statement and the expectations of many middle-class parents needs to be recognized. At least, pediatricians should be knowledgeable of the AAP policy statement on urine drug testing and should be prepared for a brief discussion of their beliefs and practice with parents and adolescents, particularly for those parents who are concerned about their teenager’s deteriorating habits, behaviors, and school performance.

Accepted for publication September 11, 2002.

This study was presented at the combined Pediatric Academic Societies’ Annual Meeting, Boston, Mass, May 12, 2000.

Corresponding author: Richard H. Schwartz, MD, Vienna Pediatric Associates, 115 Park St SE, Suite 203, Vienna, VA 22180 (e-mail: RHS738@aol.com).

REFERENCES