

Practice Variation in Screening for Sexually Transmitted Infections with Nucleic Acid Amplification Tests During Prepubertal Sexual Abuse Evaluations

Date:

Oct 2009 Visit Article

BACKGROUND: Although recent recommendations for children after suspected sexual abuse incorporate nucleic acid amplification tests (NAATs) in algorithms that detect sexually transmitted infections (STIs), screening practices in the community remain uncertain.

STUDY OBJECTIVE: We examined screening practices over time and across a variety of pediatric settings for the evaluation of STIs in sexually abused children.

METHODS: A consecutive cohort of prepubertal children younger than 11 years of age who were suspected to have been sexually abused were identified between May 2002 and April 2005 at a large tertiary children's hospital and its supporting primary care network. Detailed histories and examinations based on chart abstraction were linked to hospital laboratory records to identify those who were screened for Chlamydia trachomatis and Neisseria gonorrhoeae by means of cultures, NAATs, or both. Chi-square and logistic regression analyses identified factors associated with screening, including the effects of screening location and year of study on the likelihood that particular tests were obtained.

RESULTS: Among the initial visits of 1068 children, 32% occurred in the specialty child abuse clinic (CARE Clinic), 62% in the emergency department, and 6% in the primary care setting. Follow-up visits occurred in only 7% of children. The performance of at least one screening test increased each year, from 12% in year 1 to 18% in year 3 (P = 0.01). Among the 162 children in whom tests were obtained, there was a significant decrease in the use of culture techniques over time, from 100% in year 1 to 75% in year 3 (P < 0.001). At the same time, there was a steady increase in the use of NAATs in total (from 2% in year 1 to 41% in year 3, P < 0.001), and in the absence of culture techniques (from 0% in year 1 to 26% in year 3, P < 0.001). This growth in the use of NAATs alone was particularly seen in the emergency department setting, where 33% of children were screened only by NAAT by year 3 (P = 0.001).

CONCLUSIONS: Screening rates for STIs increased over time, a trend that is explained primarily by the use of NAATs in the absence of other tests. The increasing use of NAATs will have to be addressed more fully in creating future guidelines for this population.

Authors:

Kresnicka LS, Rubin DM, Downes KJ, Lavelle JM, Hodinka RL, McGowan RL, Grundmeier R, Christian CW

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