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Brief communication

Do pediatric chief residents recognize details of prepubertal female genital anatomy: a national survey

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Abstract

Objective: To evaluate how well a group of recently trained pediatric chief residents could label anatomic structures on two different photographs of female prepubertal genitalia. Additionally, the study sought to explore aspects of pediatric training in sexual abuse and clinical practice issues surrounding the routine genital examination.

Method: A 38-item questionnaire was mailed to pediatric chief residents at all of the officially listed pediatric residency-training programs in the continental US. Comparisons were made between this study and the responses to two previous surveys, which asked a more heterogeneous group of physicians to label one of the photographs used in the study. The second photograph was added because of its improved clarity of each anatomic structure when compared to the first photograph used in the previous studies. The study also asked about clinical practice issues surrounding the prepubertal genital examination.

Results: An overall response rate of 73% was achieved and analysis was done on 139 respondents. One-half of chief residents thought that their training during residency on sexual abuse was inadequate for practice. Sixty-four percent of chief residents correctly labeled the hymen on the photograph used in the previous studies, which was not significantly different from the 62% and 59% of physicians who correctly labeled the hymen in the previous surveys. In the second photograph, which more clearly displayed the various anatomic structures, 71% correctly labeled the hymen.

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Conclusion: Pediatric chief residents reported variable amounts of training on issues pertaining to child sexual abuse during residency, think that this time was inadequate, and, while doing slightly better than a more diverse group of previously studied physicians, did not achieve 100% accuracy in identifying basic genital structures correctly on two different photographs.

Keywords: Child sexual abuse; Genital anatomy; Prepubertal genital examination; Residency training

Introduction

Physicians play a pivotal role in the medical evaluation of child sexual abuse (Finkel & DeJong, 1994; Hibbard, 1998; Jenny, 1996; Ludwig, 2000). The physician's responsibilities include the medical history, physical examination, collection of laboratory specimens, interpretation of all findings, and the construction of a treatment plan (Jenny, 1996; Rosenberg & Gary, 1988; Schmitt, 1978; Sgroi, 1982). The physician's role requires skill in the physical examination and interpretation of findings (Hibbard, 1998; Paradise, 1990). In addition to technical skills, the physician should also have the ability to collaborate on an interdisciplinary team that works together to complete the evaluation and investigation of the child suspected of having been sexually abused (Ells, 1998).

Professional literature, over the past two decades, has examined many aspects of the physical examination in the context of sexual abuse, including: normal versus abnormal prepubertal genital and anal findings, classification systems for genital findings in the context of sexual abuse allegations, physician recognition and interpretation of genital findings, and the ability of physicians to label and identify anatomic structures of the prepubertal genitalia (Adams, 2001; Adams, Harper, Knudson, & Revilla, 1994; Herman-Giddens & Frothingham, 1987; Kellogg, Parra, & Menard, 1998; Ladson, Johnson, & Doty, 1987; Lentsch & Johnson, 2000; Muram, 1989a, 1989b).

A 1997 survey examined physician agreement about female genital examination findings comparing physicians of varying experience levels who rated themselves as skilled at evaluating children suspected of sexual abuse with an expert physician panel (Paradise et al., 1997). Findings demonstrated that assessments often differed, with the most experienced physicians resembling an expert panel most closely (Paradise et al., 1997). A related study looked at whether clinical histories influenced physicians' interpretations of female genital findings (Paradise, Winter, Finkel, Berenson, & Beiser, 1999). Diagnostic expectation resulting from the type of history provided appeared likely to influence the physicians' interpretations of genital findings as being related to abuse or not (Paradise et al., 1999). Kellogg et al. (1998) studied patient records from children referred to a sexual abuse clinic because of anogenital signs or symptoms and found that only 15% had examination findings that were suggestive, probable, or definitive for sexual abuse. The majority of children had non-specific examination findings and children without a disclosure or suspicion of sexual abuse were unlikely to have anogenital examination findings suggestive of abuse (Kellogg et al., 1998). The authors attributed the majority of physician referrals for what appeared to be normal anatomic variants to a lack of widespread knowledge and familiarity with normal genital anatomy. The study suggested that physicians evaluating children for anogenital symptoms and signs should generate differential diagnoses that consider alternative conditions and causes not directly related to sexual abuse; of course, this requires physician familiarity with normal and abnormal genital anatomy (Kellogg et al., 1998).