Child sexual abuse

Update on Medical Aspects

Cindy Brown, MD
Mission Children’s Hospital
Asheville, NC
Objectives

• Genital examination
  – Techniques
  – Findings
• Examiners
• Sexually transmitted infections
THE GENITAL EXAM OF CHILDREN
How is the genital exam performed?

• Component of a complete physical
• More detailed than genital exam during routine physicals
• Genital exam
  – Exam positions
  – Techniques
Genital exam

• Genital exam positions

Supine, frog leg

AAP Visual Diagnosis of Child Abuse
Genital exam

- Genital exam positions

Knee-chest

AAP Visual Diagnosis of Child Abuse

DB/JTHSCSA © 1998
Genital exam positions

Dorsal lithotomy (adolescents)
Genital exam

- Techniques
  - Labial traction
  - Labial separation
Was this an adequate genital exam?

Report should describe:

• Positions and techniques used
• Findings - normal and abnormal
• If positive anal or genital finding:
  – Confirmed using additional exam positions and/or techniques
  – Photographs/video recordings reviewed by an expert
INTERPRETING GENITAL EXAM FINDINGS
Which hymen is normal?
HYMEN QUIZ

What percent of sexually abused children will have diagnostic anogenital findings?

A. 5%
B. 20%
C. 65%
D. 80%
Why are genital exam usually normal?

• The contact did not cause tissue trauma, or
• If tissue trauma occurs:
  – Injury heals very rapidly
  – Delayed disclosure
Interpreting Anogenital Findings

Exam finding $\times$ = Sexual abuse

Diagnostic significance of genital exam findings has evolved in published literature
Interpreting Anogenital Findings

Multiple normative studies have been done in the past 3 decades

Diagnostic anal or genital exam findings are uncommon in child sexual abuse

Most sexually abused children have normal genital exams
Basic genital anatomy

- Urethral opening
- Vaginal opening
- Hymen
- Labia
- Posterior fourchette
Interpreting Anogenital Findings

- Size of the opening
- Variations
- Medical examiner
Size of the opening

- Difficult to measure precisely
- Exam techniques matter

Labial traction
Labial separation
Size of the opening

- Significant overlap between abused and non-abused children

A large hymenal opening is non-diagnostic of penetration
Interpreting Anogenital Findings

- Size of the opening
- Variations of normal
- Medical examiner
Variations of Normal Shapes

- Multiple anatomic shapes are possible

- Annular
- Crescentic
- Cribiform
- Septate
- Microperforate
- Imperforate
Adam’s classification

• Consensus opinions by experts
• Revised several times – 2015 latest
Interpreting Anogenital Findings

- Normal variants
- Findings caused by medical conditions
- Conditions mistaken for abuse
- Findings with no expert consensus
- Adam’s classification
  - Table #3: Approach to Interpretation of Medical Findings in Suspected Child Sexual Abuse

Updated Guidelines for the Medical Assessment and Care of Children Who May Have Been Sexually Abused
Adams, JA
*Journal of Pediatric and Adolescent Gynecology* 2015
A few examples
Interpreting Anogenital Findings

- Size of the opening
- Variations of normal
- Medical examiner
Medical Examiners

• Lack education on genital anatomy
• Myths are common
  – Medical providers
  – Lay population
  – Perpetuated by media
Medical Examiners

- Advanced training and experience in child abuse
- MD, DO, NP, PA
- SANE-P – sexual abuse
- Child Abuse Pediatrics – pediatric subspecialty
- Child Medical Evaluation Program (CMEP)
  - Specialized examiners in North Carolina
Medical Examiners

• What matters?
  – Training
  – Clinical experience
  – Continuing education
  – Knowledge of the literature

• Photodocumentation
  – Recommended by AAP, NCA, and IAFN

• Expert peer review of photographs

American Academy of Pediatrics, National Children’s Alliance, International Association of Forensic Nurses
Medical Examiners

- Terminology raising concerns
  - “No hymen”
  - “The hymen is missing”
  - “Interrupted hymen”
  - “Marital introitus”
  - “Intact hymen”
  - “Virginal hymen”
Testing and Interpretation

SEXUALLY TRANSMITTED INFECTIONS
STIs

• Testing methods have changed
STIs

- Testing methods have changed
- Cultures – previously the "gold standard"
STIs

• Testing methods have changed
• Cultures
• NAAT (nucleic acid amplification tests)
  – Detects genetic material of infecting organism
  – Acceptable in adolescents
  – Confirmatory testing needed in prepubertal children
<table>
<thead>
<tr>
<th>STD Confirmed</th>
<th>Sexual Abuse</th>
<th>Suggested Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea*</td>
<td>Diagnostic†</td>
<td>Report‡</td>
</tr>
<tr>
<td>Syphilis*</td>
<td>Diagnostic</td>
<td>Report</td>
</tr>
<tr>
<td>HIV§</td>
<td>Diagnostic</td>
<td>Report</td>
</tr>
<tr>
<td>Chlamydia*</td>
<td>Diagnostic†</td>
<td>Report</td>
</tr>
<tr>
<td>Trichomonas vaginalis</td>
<td>Highly suspicious</td>
<td>Report</td>
</tr>
<tr>
<td>Condylomata acuminata*</td>
<td>Suspicious</td>
<td>Report</td>
</tr>
<tr>
<td>(anogenital warts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herpes (genital location)</td>
<td>Suspicious</td>
<td>Report</td>
</tr>
<tr>
<td>Bacterial vaginosis</td>
<td>Inconclusive</td>
<td>Medical follow-up</td>
</tr>
</tbody>
</table>

* If not perinatally acquired.
† Use definitive diagnostic methods such as culture or DNA probes.
‡ To agency mandated in community to receive reports of suspected sexual abuse.
§ If not perinatally or transfusion acquired.
|| Unless there is a clear history of autoinoculation. Herpes 1 and 2 are difficult to differentiate by current techniques.
Summary

• Know the examiner - review CV
• Report documentation
  – What genital examination techniques were used?
  – How were findings documented?
  – Were abnormal findings reviewed by an expert?
• Sexually transmitted infections
  – What testing was used?
  – Were positive results in prepubertal child confirmed?
  – Were other transmission routes considered?
Thank you

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