



Child sexual abuse

Update on Medical Aspects

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Objectives

- Genital examination
 - Techniques
 - Findings
- Examiners
- Sexually transmitted infections

THE GENITAL EXAM OF CHILDREN

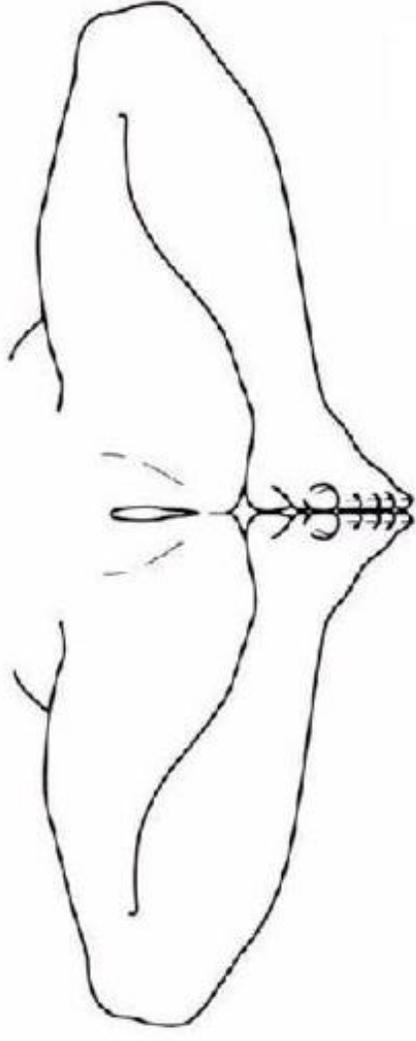
How is the genital exam performed?

- 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



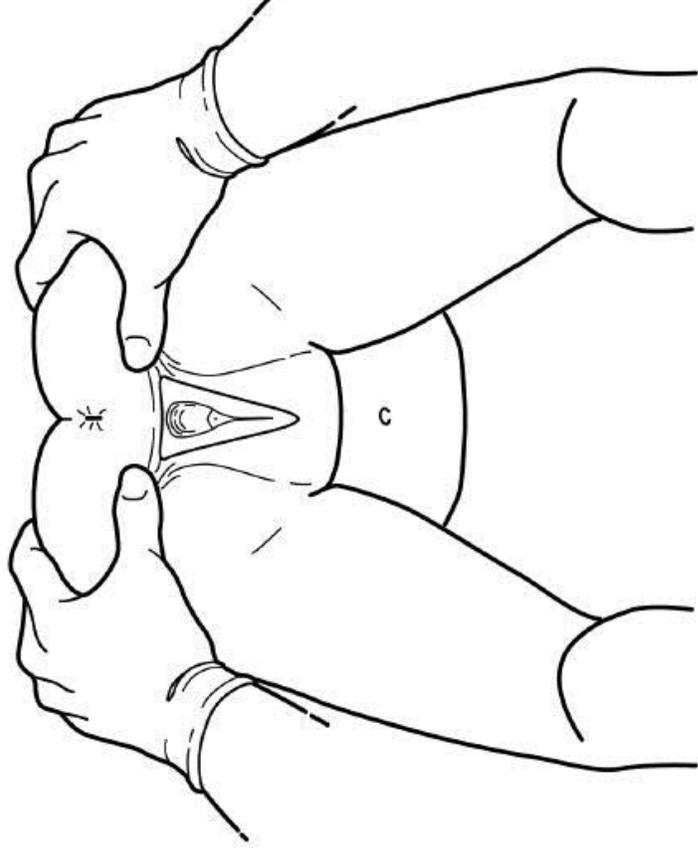
DB/JTHSCSA © 1998

AAP Visual Diagnosis of Child Abuse

Genital exam

- Genital exam positions

Knee-chest



DB/UTHSCSA © 1998

AAP Visual Diagnosis of Child Abuse

Genital exam

- Genital exam positions

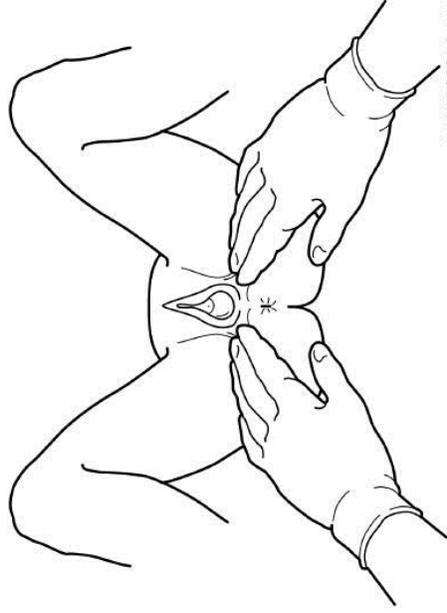
Dorsal lithotomy
(adolescents)



Genital exam

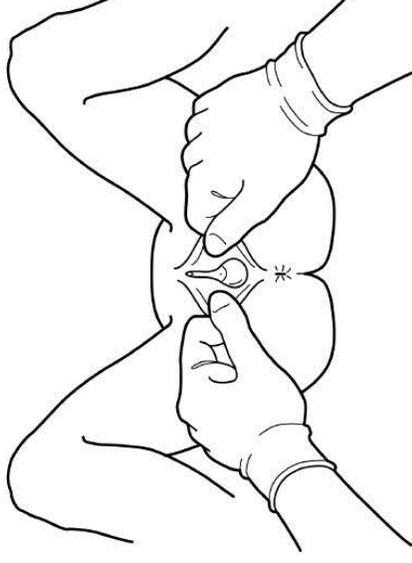
- Techniques

Labial separation



DBUTHSCSA © 1998

Labial traction



DBUTHSCSA © 1998

Was this an adequate genital exam?

Report should describe:

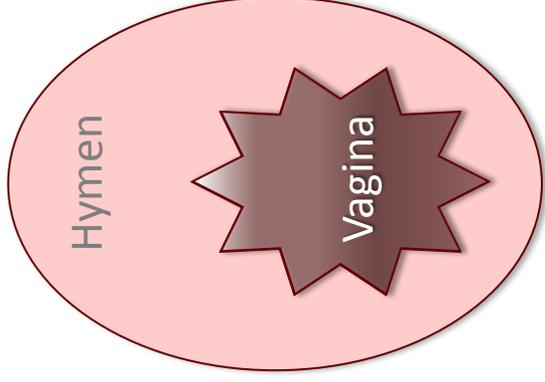
- Positions and techniques used
- Findings - normal and abnormal
- If positive anal or genital finding:
 - Confirmed using additional exam positions and/or techniques
 - Photographs/video recordings reviewed by an expert

Evolution

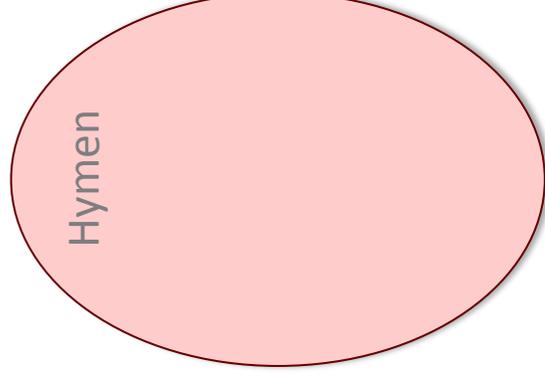
INTERPRETING GENITAL EXAM FINDINGS

HYMEN QUIZ

Which hymen is normal?



A



B

HYMEN QUIZ

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

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 **X** = Sexual abuse

Diagnostic significance of genital
exam findings has evolved in
published literature

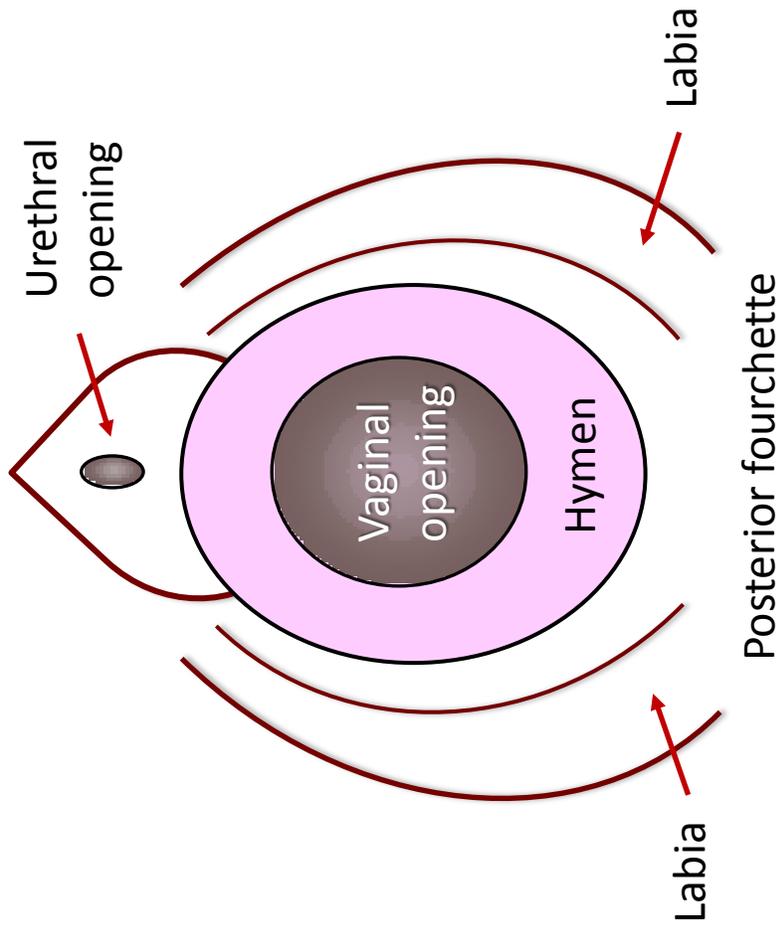
Interpreting Anogenital Findings

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

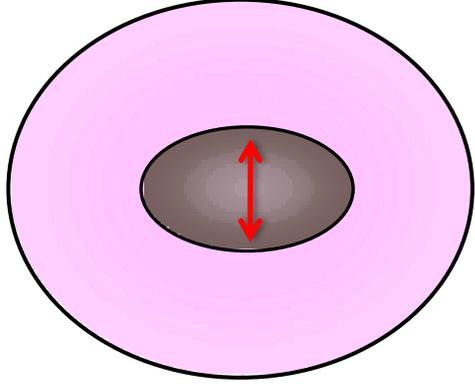


Interpreting Anogenital Findings

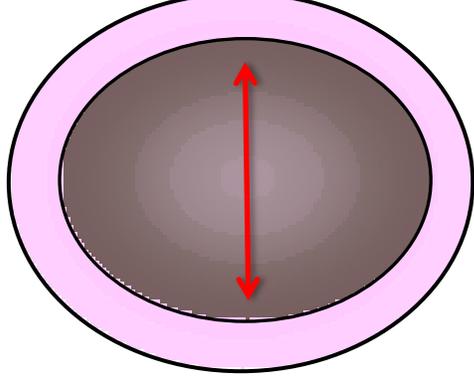
- Size of the opening
- Variations
- Medical examiner

Size of the opening

- Difficult to measure precisely
- Exam techniques matter



Labial separation



Labial traction

Size of the opening

- Significant overlap between abused and non-abused children

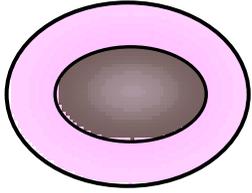
A large hymenal opening is non-diagnostic of penetration

Interpreting Anogenital Findings

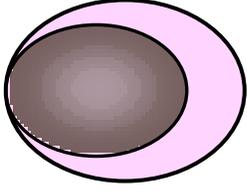
- Size of the opening
- Variations of normal
- Medical examiner

Variations of Normal Shapes

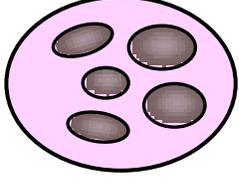
- Multiple anatomic shapes are possible



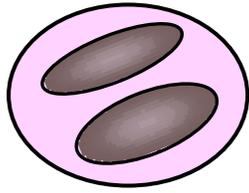
Annular



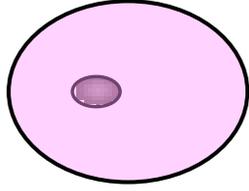
Crescentic



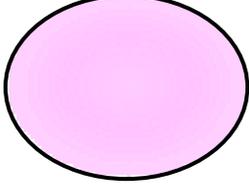
Cribiform



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 1. Implications of Commonly Encountered Sexually Transmitted Diseases (STDs) for the Diagnosis and Reporting of Sexual Abuse of Infants and Prepubertal Children

STD Confirmed	Sexual Abuse	Suggested Action
Gonorrhea*	Diagnostic	Report†
Syphilis*	Diagnostic	Report
HIV§	Diagnostic	Report
<i>Chlamydia</i> *	Diagnostic	Report
<i>Trichomonas vaginalis</i>	Highly suspicious	Report
Condylomata acuminata* (anogenital warts)	Suspicious	Report
Herpes (genital location)	Suspicious	Report
Bacterial vaginosis	Inconclusive	Medical follow-up

* 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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