Margaret's Secret
Sexual Abuse

Materials for Learners:

- Handout #1: External Genital anatomy in a pre-pubertal child (Figure 1 with labels)
- Handout #2: Classification of Ano-genital Findings in Children with Suspected Sexual Abuse (Table 1)
- Handout #3:
    - Implications of the Diagnosis of STIs for the Reporting of Sexual Abuse in Pre-pubertal Children (Table 2)
    - Frequency of STIs in 485 Girls 0-13 Years Evaluated for Sexual Abuse (Table 3)
- Clinical Pearls
- Knowledge questions and answers
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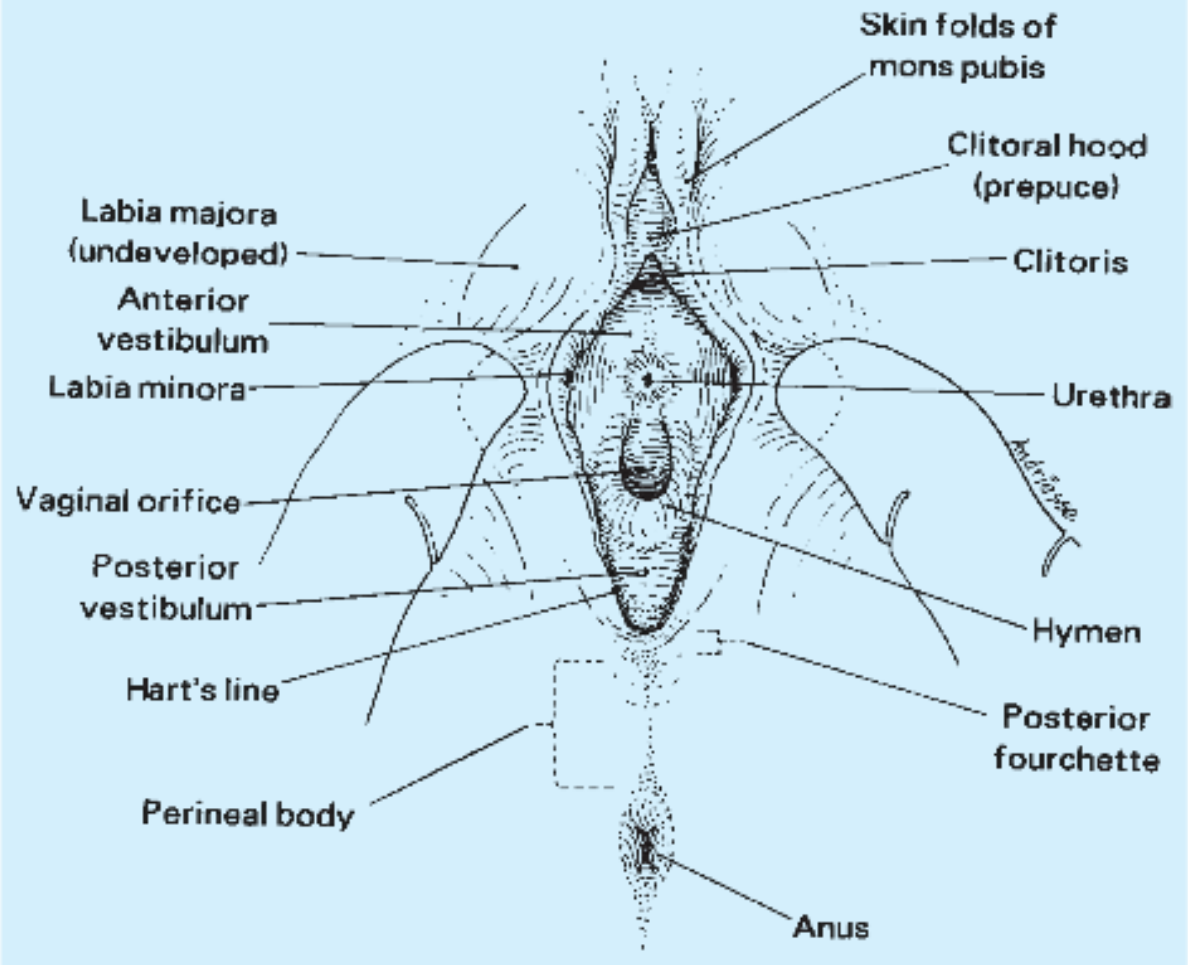
Handout #1

Figure 1: External Genital anatomy in a pre-pubertal child



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Handout #2

TABLE 1. Two classification systems for assessing physical and laboratory findings in suspected child sexual abuse

A. Muram Classification System

Category 1 Normal-appearing genitalia

Category 2 Nonspecific findings: abnormalities of the genitalia that could have been caused by sexual abuse are also seen in girls who are not victims of sexual abuse (e.g., inflammation, non-specific vaginitis, scratching) such as erythema, increased vascularity, purulent discharge, labial adhesions, and fissures.

Category 3 Specific findings: strongly suggesting sexual abuse, such as recent or healed lacerations of the hymen and vaginal mucosa, indentations in the skin indicating teeth marks (bite marks), and STIs.

Category 4 Definitive findings: any presence of sperm

B. Adams Classification System

I. Findings documented in newborns or commonly seen in non-abused children

A. Normal variants

Periurethral/vestibular bands
Intravaginal ridges/columns
Hymenal bumps/mounds
Hymenal tags/septal remnants
Linea vestibularis
Hymenal notch/cleft in anterior half of hymenal rim, on/above 3–9 o'clock line
External hymenal ridge
Congenital hymenal variants: crescentic, annular, redundant, septate, cribiform, microperforate, imperforate
Diastasis ani
Perianal skin tag
Hyperpigmentation of labia minora/peri-anal tissues in children of color
Urethral dilation with labial traction
Thickened hymen

B. Findings caused by other medical conditions

Erythema of vestibule, penis, scrotum, or peri-anal tissues
Increased vascularity of vestibule and hymen
Labial adhesions
Vaginal discharge
Friability of posterior fourchette or commissure
Excoriations/bleeding/vascular lesions
Failure of midline fusion
Anal fissures
Venous congestion/pooling
Flattened anal folds
Partial/complete anal dilation to less than 2 cm with/without stool visible

II. Indeterminate Findings: Findings which may require further studies/evaluation to determine significance. May support child's disclosure of abuse (if given) but should be interpreted with caution if child gives no disclosure. May require report to child protective services to further

evaluate possible sexual abuse.

A. Physical findings

Deep notches/clefts in posterior/inferior rim of hymen in prepubertal girls
Deep notches/complete clefts in the hymen at 3 or 9 o'clock in adolescents
Posterior rim of hymen which appears to be less than 1 mm wide in prone knee chest position or using water to float hymen edge when child is supine
Apparent ano-genital warts
Vesicular lesions/ulcers in ano-genital area
Marked, immediate anal dilation to a diameter of 2 cm or more in absence of chronic constipation, sedation, anesthesia, neuromuscular conditions.

B. Lesions with confirmed etiology which have indeterminate specificity for sexual transmission (Report to child protective services recommended by AAP guidelines unless perinatal or horizontal transmission considered likely)

Ano-genital condyloma accuminata in a child in absence of other abuse indicators
Ano-genital herpes 1 or 2 in child with no other indicators of abuse

III. Findings diagnostic of trauma/sexual contact: Findings which support a disclosure of sexual abuse (if one is given) or in absence of clear, timely, plausible history of accidental injury

A. Acute trauma to external genital/anal tissue

Acute lacerations/extensive bruising of labia, penis, scrotum, perianal tissues, or perineum
Fresh laceration of posterior fourchette

B. Healing injuries (difficult to assess unless acute injury was previously documented at same location)

Perianal scar
Posterior fourchette/fossa scar

B. Injuries indicative of blunt force penetrating trauma (or of abdominal/pelvic compression injury if such history is given)

Acute laceration (partial or complete) of hymen
Ecchymosis on hymen
Peri-anal laceration extending deep to external anal sphincter
Healed hymenal transection
Absence of hymenal tissue in posterior half of hymenal rim

C. Presence of infection confirms mucosal contact with infected bodily secretions, contact most likely to have been sexual in nature

Positive confirmed culture for gonorrhea from genitalia, anus, throat outside neonatal period
Confirmed diagnosis of syphilis, if perinatal transmission ruled out
Trichomonas vaginalis infection in child older than 1 year of age
Positive culture from genitalia or anus for Chlamydia in child older than 3 years of age
Positive serology for HIV, if perinatal/blood products/contaminated needle transmission ruled out

E. Diagnostic of sexual contact

Pregnancy
Sperm identified in specimens taken by directly from child's body

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Muram System adapted from Muram D. Classification of genital findings in prepubertal girls who are victims of sexual abuse. Adolesc Pediatr Gynecol 1988:1:149-151. Adams' System adapted from Adams J, Kaplan R, Starling S, Mehta N, Finkel M, Botash A, Kellogg N, Shapiro, R. Guidelines for medical care of children who may have been sexually abused. J Pediatr Adolesc Gynecol 2007;20:163-72.

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Handout #3

TABLE 2. Implications of the diagnosis of sexually transmitted infections (STIs) for the reporting of sexual abuse of prepubertal children

STI confirmed	*Sexual abuse*	*Suggested action*
Gonorrhea[a,b]	Diagnostic	Report[c]
Syphilis[a]	Diagnostic	Report[c]
HIV[d]	Diagnostic	Report[c]
Chlamydia[a,b]	Diagnostic	Report[c]
Trichomonas vaginalis[a]	Highly suspicious	Report[c]
Condylomata acuminata[a] (anogenital warts)	Suspicious	Report[c]
Genital herpes	Suspicious	Report[c,e]
Bacterial vaginosis	Inconclusive	Medical follow-up

[a] If not perinatally acquired and rare nonsexual vertical transmission is excluded.
[b] Culture and/or nucleic acid amplification tests should be confirmed.
[c] To agency mandated in state or community to receive reports of suspected sexual abuse.
[d] If not perinatally or transfusion acquired.
[e] Unless clear history of autoinoculation.
Data from Centers for Disease Control and Prevention. STD treatment guidelines 2010. *MMWR* 2010;59[RR-12]:93; and Kellogg N, the American Academy of Pediatrics Committee on Child Abuse and Neglect. The evaluation of sexual abuse in children *Pediatrics* 2005;116:506–512.

TABLE 3. Frequency of STIs in 485 Girls 0-13 Years Evaluated For Sexual Abuse

STI	*Frequency (%)*
Gonorrhea	3.3
Chlamydia	3.1
Trichomonas vaginalis	5.9
Syphilis	0.3
HIV	0
Genital herpes	1

Data from Girardet R, Lahoti S, Howard L, et al. Epidemiology of sexually transmitted infections in suspected child victims of sexual assault. *Pediatrics* 2009;124:79-86. Note that only a small number of boys enrolled, none were found to have an STI

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Clinical Pearls:

- Many signs and symptoms of child sexual abuse are non-specific and can be seen in other medical or behavioral disorders.

- The ano-genital exam in victims of child sexual abuse is usually normal.

- The child's clear statement that he or she has been abused is usually the best evidence that abuse has occurred. Unless there are specific signs or symptoms or a recent (<1 week) episode that needs to be evaluated, the forensic history should be obtained first before the physical examination.

- Prepubertal victims of sexual abuse should be selectively screened for STIs. In contrast, universal screening of adolescents is recommended given the high rates of consensual sexual activity and asymptomatic infection.

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Knowledge questions:

1. *Which of the following is an important reason for performing an ano-genital examination in suspected victims of sexual abuse?*
   a. Document injuries
   b. Perform STI screening if indicated
   c. Reassure child that (s)he is not physically "damaged"
   d. All of the above

2. *Consider testing a pre-pubertal child for STIs when which of the following criteria are met?*
   a. Physical exam shows signs of an STI or there is an ano-genital injury
   b. Child discloses contact with alleged perpetrator's genitalia
   c. All of the above
   d. None of the above

3. *What is usually the best evidence that child sexual abuse has occurred?*
   a. Physical exam findings
   b. DNA evidence
   c. Videotape of the abuse
   d. Child's clear statement

4. *True or False?*
   If a child gives consent to sexual contact with an adult, it is not sexual abuse.

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Answers to knowledge questions:

1. *Which of the following is an important reason for performing an ano-genital examination in suspected victims of sexual abuse?*
   Preferred response: D "All of the above."
   Most victims of sexual abuse have normal exams. The purpose of the medical exam is to document injuries if present, screen for STIs if indicated, and in cases where the exam is normal, reassure the patient and family that the child's body is normal and healthy. Many survivors of sexual abuse worry that they are "damaged goods" and a normal exam can be a tremendous relief to the child and family.

2. *Consider testing a pre-pubertal child for STIs when which of the following criteria are met?*
   Preferred response: C "All of the above."
   The prevalence of STIs in children who have been sexually abused is low (<10%). Selective screening for STIs in pre-pubertal victims of child sexual abuse is recommended. Criteria for screening include a disclosure of contact with the perpetrator's genitals, a perpetrator with a known STI, signs of penetrating injury or an STI, and a sibling or other child in the household with an STI.
   .
3. *What is usually the best evidence that child sexual abuse has occurred?*
   Preferred response: D "Child's clear statement."
   Evidence of penetrating ano-genital trauma is uncommon in child sexual abuse. When it occurs it can be helpful in moving the case forward in criminal court. However, most cases of child sexual abuse have normal ano-genital exams. Therefore, the child's statement that sexual contact occurred is usually the best evidence of abuse. A detailed interview of the child should occur with a professional trained in forensic interview techniques so that open ended, non-leading, developmentally appropriate questions are asked. When a child describes in detail sexual activities that are above and beyond their developmental level, it can be very compelling to professionals in child protection and law enforcement, as well as to juries in the criminal court system.

4. *True or False?*
   Preferred response: False.
   Children by virtue of their age and developmental level are not able to give consent for sexual activity. The age at which an individual can consent to sexual activity varies by state. In some states, the age of consent is 16 years, provided the sexual activity is not with an individual in a position of authority and the teen does not have cognitive or other impairments. Medical providers should be familiar with the laws of their state. (See Child Welfare Information Gateway.

State statutes: searchable online database. Available at : www.childwelfare.gov/systemwide/laws_policies/state. Accessed: April 9, 2012)

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Recommended CD ROMS

Lowen D, Reece R, the American Academy of Pediatrics. *Visual diagnosis of child abuse*, CD-ROM, 3rd ed., 2008.

Muram D, Harrison L, Adams J, eds. North American Society for Pediatric and Adolescent Gynecology CD-ROM: *Sexual abuse: medical evaluation for the primary care physician,* 2002.