

## THE MEDICAL EVALUATION OF CHILD ABUSE

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Always remember that behind  
each case and number is an  
individual child and family  
whose life and perception of  
self your attitude and actions  
stand to dramatically influence.



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## WHAT IS CHILD ABUSE?

- A girl is slapped on the face by her mother that leaves a red hand print and a small abrasion on her cheek
- A boy is spanked by his father that causes redness of the skin that fades
- A child soils his pants and is made to wear the dirty pants for all to see
- A child is shaken violently that causes headache
- A child is dirty with poor oral and physical hygiene
- A child is forced to eat the food he intentionally threw on the floor
- A teenager is punished for using pot that leaves bruises
- A child is always told she is worthless and unwanted
- A child is disciplined with a razor strap



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## WHAT IS CHILD PHYSICAL ABUSE?

- Definition can range from "intentional inflicted injury" to "any act that impairs the developmental potential of a child".
- Included in this definition are neglect (acts of omission) and physical, psychological, or sexual injury (acts of commission) by a parent or caregiver.
- Nationally, physical abuse (18.6% of reports) occurs more frequently than sexual abuse (9.6%) but is not as often reported (DHHS, 2001).
- American Indians/Alaska Natives compose 2% of reported victims (DHHS, 2001).



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## WHAT IS CHILD SEXUAL ABUSE?

- The involvement of children and/or adolescents in any sexual activities that:
  - They do not fully comprehend
  - They are developmentally unable to give consent
  - Violate social taboos or society norms
- This can include fondling, intercourse, sodomy, voyeurism, oral copulation, pornographic depiction of children in any way, and exhibitionism.
- Each state has statutes and there are federal statutes that classify child abuse as a felony or misdemeanor, depending on the degree of penetration and whether any type of force was used.



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## HOW CAN YOU TELL ABUSIVE FROM NONABUSIVE SEXUAL ACTS?

Three ways to tell if a sexual act is abusive –

1. Power differential – one party controls the other such as a father, teacher, coach, etc.
2. Knowledge differential – one participant has a more sophisticated understanding of the significance and implications of the encounter
3. Gratification differential – the primary purpose of the activity is to obtain sexual gratification for the perpetrator



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## WHAT DOES CHILD ABUSE LOOK LIKE IN INDIAN COUNTRY?

- Few statistics exist – most are general statistics, few are Tribal or Reservation specific
- In 1999, a National Indian Justice Center film "Bitter Earth: Child Sexual Abuse in Indian Country" estimated that 1 in every 4 girls and 1 in every 7 boys are victims by age 18.
- In 2002, the National Child Abuse and Neglect Data Systems (Department of Health and Human Services) reported victimization rates of 21.7 cases per 1,000 children living in Indian Country (10.7 for Whites, 9.5 for Hispanics, 20.2 for Blacks).

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- In 2000, A Tribal survey done by the Casey Family Programs Foundation for the Future and the National Indian Child Welfare Association estimated that in Indian Country:
  - That only 61% of child abuse cases are reported
  - Over 80% of responding Tribes had a Child Protection Team (CPT) and protocols in place
  - 50% operated their own social and police service
  - Only 23% of Tribes managed their own cases
  - 33% relied on others with no Tribal input
  - 2% contracted for these services

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- Remaining 42% of Tribes worked with individual states (20%), counties (11%), Bureau of Indian Affairs (7%), and Tribal Consortiums (4%).
- 42% of Tribes included IHS as a CPT member but at the same time 77% claimed lack of access for medical provider examinations
  - 17.5% of Tribes used a local hospital
  - 7% used a local doctor
  - 3.5% used a specialist



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## CHILD ABUSE IN NORTHEAST UTAH

- "No child abuse in the Uintah Basin."
- Locally we see more girls than boys
- More sexual abuse than physical abuse (most physical abuse seen at hospital or not reported)
- All ages, all races, all socioeconomic classes
- All but several perpetrators are men/boys of all ages
- No weapons, GHB, rohypnol; alcohol in 50% or greater
- In the mid 1990's the Northern Ute Reservation (4200) had a higher incidence of child abuse than Roosevelt (6000) or Vernal (8000)



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## CHILD ABUSE IS A UNIQUE COMMUNITY PROBLEM REQUIRING A TEAM OF SPECIALIZED AND DEDICATED PROFESSIONALS AND FACILITIES.

- Police officers: local and surrounding area
- Social Services
- Victim Advocate
- Prosecutor
- Guardian Ad Litem
- Children's Justice Center
- Medical provider



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## DO PHYSICIANS RECOGNIZE SEXUAL ABUSE?

Of 129 pediatricians and family practice physicians surveyed (these are your family doctors):

Percent that could not identify:

- 41% hymen
- 39% labia majora
- 24% labia minora
- 11% clitoris
- 22% urethral opening

Of 166 primary care physicians surveyed. (your family doctors):

Percent that could not identify:

- 38% hymen
- 21% labia majora
- 17% labia minora
- 6% clitoris
- 28% urethral opening

Ladson, Johnson, Doty: AJDC, 1987

Lentsch and Johnson: Child Maltreatment, 2000



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In Cincinnati between 1994 and 1998, 46 prepubertal girls were diagnosed with nonacute genital findings indicative of sexual abuse by pediatric emergency medicine physicians. All were re-examined by a physician with training in child sexual abuse. These trained physicians concluded that:

- Only 17% (8) showed clear evidence of abuse
- Normal findings were noted in 32 children (70%)
- Nonspecific changes were seen in 4 children (9%)
- Two children (4%) had findings more commonly seen in abused children but were not diagnostic for abuse

Mazoroff, Braulley, Brandner, Meyers, and Shapiro; CAN, 2002

- \* **ER physicians need more training in this area and all children with an abnormal genital exam in the ER should be seen by a provider trained in child sexual abuse.**



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## WHY DON'T PHYSICIANS RECOGNIZE SEXUAL ABUSE?

- This is a specialty that is not taught in medical school. Some schools have a rotation in child abuse, and now a few schools are offering a fellowship.
- Physicians who do not have specialized training do not recognize microtrauma of the genitalia.
- Child abuse cases seen by the family practitioner, general pediatrician, and the ER physician are not subject to review by trained peers (peer review).
- Attending a conference even once a year on child abuse is not enough to keep skills and expertise current if a large enough volume of cases is not seen.



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- Some physicians do not entertain the possibility of sexual abuse in the differential diagnosis.
  - Doesn't happen in their locality
  - This particular parent or caregiver would not do a thing like that
  - Another diagnosis is perhaps more likely
  - These cases are very time consuming
  - Time away from practice to testify
  - Parents angry at the physician for reporting
  - Afraid of retribution or bad publicity if not substantiated
  - Other



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## TOP TEN THINGS THAT UNTRAINED MEDICAL PROVIDERS MAY DO:

- 10 - Uses the term "virginal" or "marital" to describe the genital anatomy
- 9 - States that frequent yeast or urinary tract infections are caused by sexual abuse
- 8 - States that only female physicians can examine little girl's private areas
- 7 - Forces medical examinations on children
- 6 - Collects forensic evidence on victims whose assault occurred > 3 days ago



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- 5 - Says it's normal for a child to have no hymen
- 4 - Says they can always tell if an adolescent has had sex or not
- 3 - Makes a full assessment of the genital anatomy in under 3 seconds
- 2 - Talks to the child in the presence of the parents and to the parents in the presence of the child
- 1 - The medical provider who thinks they need no special training to evaluate sexually abused children

**NEARLY ALL MEDICAL PROVIDERS EXCEPT THOSE  
MOST EXPERIENCED TEND TO OVERCALL FINDINGS.**



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## WHAT CAN THE COMMUNITY EXPECT FROM THE MEDICAL PROFESSIONAL?

- Legal system wants evidence, but the medical exam is only one part of the investigation/prosecution process and should not be depended upon to make or break a case
- Provision of appropriate medical care that is objective, conservative, based on current science and research
- Always working in the best interest of the child
- Willingness to be available, involved, interact with other agencies, know the social and legal system



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- Precise and accurate documentation – forms, drawings, photography/video, timely and well written reports
- A system for getting patients in to see you without excessive hassles
- A system for emergent examination
- Follow-up and referral for findings
- Willingness to testify in court
- Community involvement – advocate for prevention programs, teaching other medical professionals, act as a resource
- Professional collegiality



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## WHAT IS NEEDED FROM THE MEDICAL EXAMINATION?

- American Academy of Pediatrics:
  - Developmentally appropriate interview in the child's own words
  - Complete examination to include growth, emotional state, development, social state
  - Directed genital examination for specific signs or physical indicators
  - Laboratory evaluation, cultures for STD's, other as indicated by history or physical



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- Other things needed from the medical exam:
  - Intake history to include chief complaint and present illness
  - Caretaker history to include social, family, medical, developmental, nutritional history
  - Complete medical evaluation of all body systems
  - Laboratory studies/x-rays as needed
  - Recommendations for follow-up, aftercare, and referral
  - Collection of forensic evidence as needed
  - Complete documentation of status including drawings, photography, video
  - Identification and treatment of injuries



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## THE MEDICAL EXAMINATION

The genital examination for suspected child abuse is NOT traumatic for children if done in a caring and non-threatening manner.



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If a child is unable or unwilling to cooperate, DO NOT PERFORM THE EXAMINATION BY FORCE OR RESTRAINTS. Try again on another day. Sedation should only be considered in an appropriate setting when immediate collection of evidence or care for an acute injury is indicated.



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## WHY TAKE PHOTOGRAPHS OF INJURIES AND WHY USE A COLPOSCOPE OR DIGITAL CAMERA?

- Photodocumentation is considered legal forensic evidence in court
- Captures a permanent record of what exactly was or was not present at that point in time
- Is a baseline for later comparison and is great for tracking the healing of injuries
- Provides a media for teaching and research

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- Both the colposcope and the digital camera/video are tools that provide magnification and photodocumentation
  - Colposcope through internal magnification and attached camera
  - Digital camera/video images magnified through software
- Colposcope with attached 35 mm camera once considered the "gold standard" in the care of child abuse victims but technology is changing that
- Movement is now toward digital video
- An experienced examiner will be able to determine most abnormalities with the use of either

**NO POLAROID OR FIXED LENS CAMERAS!!**



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### **COLPOSCOPE AND 35 MM CAMERA**



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### **WHY DO A MEDICAL EXAMINATION WITH PHOTODOCUMENTATION ON CASES SUCH AS FONDLING WHERE THERE ARE NO INJURIES?**

- **ALWAYS** photograph genitalia regardless of presence or absence of injuries – legal record of what existed at the time medical care was obtained
- Know what is wrong with the child – treat as if this was your own child
- Not all details revealed to law enforcement and/or social services
- Child's perception of what has happened
- Power of medical profession to say you need therapy



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## COMPONENTS OF THE MEDICAL EXAM FOR SUSPECTED CHILD ABUSE

Why examine the whole body in suspected sexual abuse?

- To build rapport and gain trust
- To determine the child's baseline health status
- To determine if growth and development seems appropriate for age
- To discover other injuries or diseases
- Focus not just placed on genitalia



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## WHAT THE MEDICAL EXAMINATION OF THE ABUSED CHILD SHOULD INCLUDE:

- Developmental screening test
- Reason for visit (chief complaint)
- History of reason for visit (history of present illness)
- Family, social, environmental history
- Past medical history
- Height, weight, blood pressure if older
- Head, eyes, ears, nose, throat, teeth, lymph nodes
- Skin, neck, heart, lungs, breasts (Tanner stage)

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- Abdomen, extremities, nerves and reflexes, circulation
- Complete external genital and anal exam (external vs. internal; pediatric vs. adolescent)
- Laboratory, x-rays, other tests
- Diagnosis, is history consistent or not with findings
- Recommendations for further care



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## USE OF THE WOOD'S LAMP IN THE IDENTIFICATION OF SEMEN

In a study by Santucci, Nelson, McQuillen, et. al.,  
(*Pediatrics*; December 1999, 104:1342-1344):

- Physicians were asked to distinguish between semen and 13 other substances using a 360 nm Wood's light
- Examples of other substances: Surgilube, bacitracin, A&D ointment, Barrier cream
- Participants unable to distinguish semen from others
- Semen fluoresces at 409 nm, a wavelength NOT available in commercial Wood's lamps



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## FORENSIC FINDINGS IN PREPUBERTAL VICTIMS OF SEXUAL ASSAULT

Study by Christian, Lavelle, De Jong, et. al. (*Pediatrics*:  
July 2000; 106:100-104):

- Objective: To determine if 72 hour recommendation for forensic evidence collection is valid (Code R kit)
- Method: 273 charts reviewed of prepubertal children evaluated for sexual assault
- Results:
  - Genital injuries in 23%
  - Forensic evidence found in 25%
  - 90% of evidence found in < 24 hours

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- Results (continued):
  - 64% of evidence found on clothing and linens; NONE was recovered > 24 hours except on clothing and linens
  - No positive semen > 9 hours
- Conclusions:
  - Guidelines used for collection of physical evidence is not applicable to prepubertal children
  - Swabbing the body for evidence after 24 hours is unnecessary
  - Clothing and linens yield the majority of evidence



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## WHY ARE MOST MEDICAL EXAMS NORMAL?

- Nature of assault may not be damaging – most perpetrators do so in such a manner to hide the acts, not to leave scars
- Child's perception of "penetration" may not be correct
- Disclosure may be delayed days to years after assault and injuries heal
- Body's ability to heal
- Hymen can "grow" as puberty progresses and thus masking prepubertal changes
- Examiner knowledge of what is normal or abnormal
- Follow findings through healing with drawings, photography, and/or video to prove acute injury



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**A normal medical examination NEVER rules out the possibility of sexual abuse.**

**"It's normal to be normal."**

Joyce Adams, MD



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## WHEN SHOULD A MEDICAL EXAMINATION BE DONE?

- Level 1: Immediate evaluation
  - Sexual assault has occurred within 72 hours. Need collection of forensic evidence and recognition and care of injuries.
  - Sudden onset of vaginal or rectal bleeding or abdominal pain with a possible history of sexual contact that includes fondling.



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- Fever associated with other symptoms in the abdominal or genital area with possible sexual contact
- Severe emotional stress in a child or guardian which may pose imminent danger to self or others
- Situation where child is in danger of continued victimization
- Level 2: Evaluation within 24-72 hours
  - History of possible inappropriate sexual contact occurring between 72 hours and > 2 weeks prior to disclosure and has no urgent or acute problems



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- Physical symptoms needing attention (vaginal discharge, painful urination, etc.)
- Presence of behavioral symptoms such as difficulty sleeping, refusing to attend school, etc.
- Danger of upcoming contact with the alleged perpetrator
- Level 3: Evaluation within 1-4 weeks
  - Any child where there is a concern of sexual abuse



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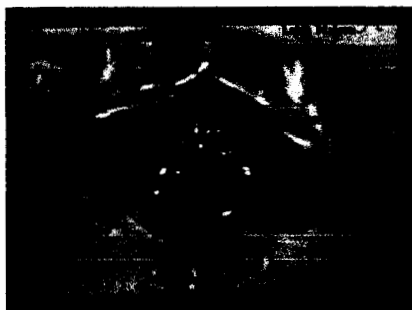
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- HYMEN AND THE FACE OF A CLOCK
- FINDINGS FROM 3:00 TO 9:00



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## MYTHOLOGY OF THE HYMEN

- Girls can be born without a hymen
- The hymen is always injured with sexual contact
- It is not resilient and cannot heal
- It's presence is proof there has been no penetration, however slight



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## IS ABSENCE OF THE HYMEN CONGENITAL?

- Jenny et al: 1,131 newborns examined
- Merlob: Over 25,000 newborns examined and:

**NO CASES OF CONGENITAL ABSENCE  
OF THE HYMEN HAVE EVER BEEN  
REPORTED IN THE MEDICAL  
LITERATURE.**



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## HYMENAL MORPHOLOGY

WHAT THE HYMEN LOOKS LIKE



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### CRESCCENTIC HYMEN

- Variable insertions anteriorly
- Hymenal tissue present only in posterior aspect
- Most common type in prepubertal children



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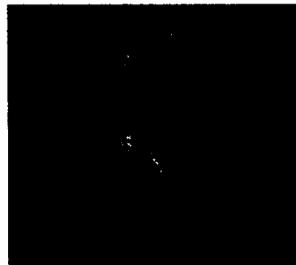
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### ANNULAR HYMEN

- Hymen is present 360 degrees around the vaginal opening



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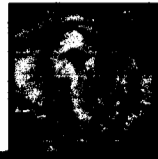
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### REDUNDANT HYMEN (ESTROGEN)

- Hymen is thickened and often folding onto itself
- Common in adolescents and children less than age 2
- May "relax" into other forms with proper method of labial traction



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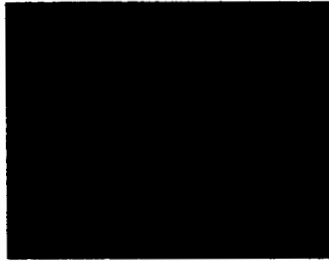
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### SLEEVELIKE HYMEN

- Hymen protrudes from vaginal opening in a tube like manner



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### COMPLETE HYMENAL TRANSECTION

- Is an ABNORMAL finding
- An area where the hymen is torn through to the base with no tissue remaining
- Edges do not heal back together



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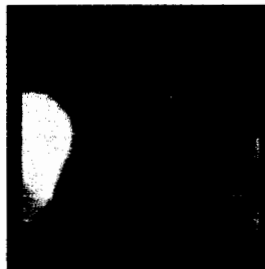
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### HYMENAL TEAR OR PARTIAL TRANSECTION

- Is an ABNORMAL finding
- An area where the hymen is torn to any degree but NOT through to the base; some hymenal tissue remains
- Edges will usually heal back together



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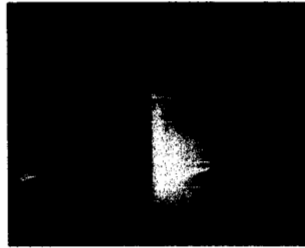
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## ABSENCE OF THE HYMEN

- Is an ABNORMAL finding
- Term NOT used to denote a congenital absence of the hymen
- Is a wide area in the posterior half of the hymenal rim (3-9:00) with an absence of tissue extending to the base and confirmed in knee chest position



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## ISSUES IN MEASUREMENT OF THE VAGINAL OPENING

- Changes with method of separation
- Changes with degree of relaxation
- Changes with position of child
- No standardized measurements for age, size, race, or Tanner Stage
- It is better to determine WHY the opening is large rather than just that it is

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## FINDINGS FOUND EQUALLY IN ABUSED AND NONABUSED CHILDREN

- Labial agglutination
- Increased vascularity
- Linea vestibularis
- Increased friability
- Perineal depression
- Hymenal bump, tag, band, superficial notch, or external ridge
- Longitudinal intravaginal ridge

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## PERIANAL ANATOMY IN NONABUSED PRESCHOOL CHILDREN

- Findings more common in girls:
  1. Venous congestion in left lateral position
  2. External dilatation in left lateral and knee chest positions
- Findings more common in boys:
  1. Midline depressions and smooth areas in both knee chest and left lateral positions

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- Findings more common in knee chest position:
  1. External and total anal dilatation
  2. Midline smooth areas and depressions
  3. Prominent anal verge
- Total anal dilatation was rare

Myhre, Berntzen, Bratlid 2001



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## CONCLUSION

Only a few vulvar or hymenal findings are reliable indicators of sexual abuse among prepubertal girls. Furthermore, these findings are **INFREQUENTLY** found among children examined for sexual abuse. In fact, findings strongly suggestive of sexual abuse were observed in less than 5% of abused children. Therefore, the genital exam is unlikely to support or negate a child's disclosure. Consequently, it is critical that legal experts focus on the child's statements as the primary evidence of sexual abuse.



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**Establishing the diagnosis of child sexual abuse has very serious and often life long stigmatizing implications. Thus, it is imperative to err on the side of conservatism in evaluating any case.**



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### **THINGS NOT TO DO**

- **DO NOT** ask the parents whether or not they want to have the exam done – inform them that is the next step in the investigation process and help make appointment
- Don't suggest to the family or the child that the examination will be traumatic
- Don't tell the parent or caretaker that a pelvic exam will be performed on a prepubertal child
- Don't promise the child that there will be no shots or needles
- Don't say the medical examination will determine what happened to the child



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### **PHYSICAL ABUSE - BRUISES**

- Can occur on any surface
- Most common surfaces for accidental bruising are the lower arms, lower legs, knees, elbows
- Bruising on the trunk is rare
- Toddlers often have bruises in the foreheads from pitching forward
- Children who can only crawl rarely show bruising
- Any bruises in young infants who are not yet pulling to stand should raise concerns of abuse or an unsafe environment



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## THE RATE OF HEALING OF BRUISES DEPENDS UPON:

- The location of the bruise. Bruises on the face or genitals heal faster than other body parts because of the large blood supply in these areas.
- The depth of the bruise. Deep tissue bruises on the thighs or hips may take longer to be visible and to heal.
- The amount of bleeding into the tissue. Bruises from large amounts of blood in the tissue take longer to heal.
- The amount of circulation in the bruised area. Bruises will appear and resolve more slowly if circulation in that area is impaired.



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Generally, bruises progress through a series of color changes as the acute inflammation subsides and the red blood cells and hemoglobin breaks down. Colors change from red to blue, green yellow, and brown before disappearing. Since there is so much variability in the speed of this progression, it is safest to describe bruises as either "new" (red, purple, or blue) or "old" (green, yellow, brown).



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Finding suspicious bruises of different ages on a child is very concerning when evaluating child abuse, particularly if they are located on the same area of the body. Such bruising suggests repeated episodes of injury.



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In darkly pigmented children, skin bruises may be difficult to see. Notice the skin shows little if any discoloration but the underlying tissue shows significant hemorrhage.



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