

# **MEDICAL EXAMINATION FOR CHILD SURVIVORS OF SEXUAL ASSAULT**

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## **SPECIFIC CRITERIA FOR ADOLESCENTS**

**A**dult treatment guidelines are appropriate for post-pubertal adolescents (Tanner stage 5). For adolescents in early puberty (Tanner stages 1 and 2) use paediatric guidelines. For intermediate puberty, monitor closely and choose either adult or paediatric guidelines. Non-compliance is problematic and strategies should be introduced to promote adherence and more frequent visits and intensive counseling.

### Tanner stages

Stage	Pubic Hair	Breasts
1	Pre-adolescent	Pre-adolescent
2	Sparse, lightly pigmented, straight, medial border labia	Breast and papilla elevated as small mound; areola diameter increased
3	Darker, beginning to curl, increased amount	Breast and areola enlarged, no contour separation
4	Coarse, curly, abundant but less than adult	Areola and papilla form secondary mound
5	Adult feminine triangle, spread to medial surface of thighs	Mature; nipple projects, areola part of general breast contour

Because many children disclose their abusive experiences long after the last episode of inappropriate contact, the findings of acute trauma and/or forensic evidence are unlikely to be present. Therefore, the urgency of an immediate medical examination may not be critical. Chronic residual to genital or anal trauma will be present regardless of when the examination is completed. A knowledgeable and sensitive clinician must complete a thorough examination of the sexual abuse victim. The examination should always be completed in a manner, which is therapeutic to the child and helps counter any perceived altered body image that they may have as a result of their victimization. An uncooperative child cannot be examined in a thorough manner. Sensitivity and patience are essential to allaying any anxiety that the child may have in anticipation of the examination. Time spent demystifying the examination, which they will experience and answering the child's questions or fears will go a long way in facilitating cooperativeness.

## ***PREPARING THE CHILD FOR THE EXAMINATION***

It is essential that a trusting relationship be developed between the doctor and the child prior to examining the child sexual abuse victim. Children who have been abused often feel betrayed by those people in whom trust should have been implicit. The physician has an opportunity to be one of the first professionals with whom the child can build a foundation of trust. The purpose of the examination should be explained to the child. It should be emphasized that this will be a complete head to toe examination, that all parts of the body are important. An adult companion of the child's choice should be present during the examination. The doctor should determine the names that the child uses for body parts and communicate with the child in that terminology. An empathetic and patient approach by the doctor usually overcomes problems associated with the doctor's gender.

The purpose of the examination is not only to document abnormality, but also normality. Children who have been abused frequently feel that they are "damaged goods" and may have an altered body image. The doctor is the only professional who, after a thorough examination, can tell these children that they are physically "normal." Older children will frequently be concerned about their status as a virgin (even in cases where genital fondling is the only alleged activity) and other such questions, in the older child, addressing all of these issues are important.

Victims of sexual abuse have had no control over what has happened to them. Therefore, it is important that the physical examination is approached in a manner, which provides the child with a sense of participation and control. This is in part accomplished by allowing the child to participate in the examination by asking questions throughout the examination. Depending upon the age of the child, the results of the examination are discussed with the child. Although the chronic subtle signs of genital trauma may have considerable evidentiary value i.e. small healed transsections, alterations of the hymenal architecture, etc., they need to be presented in such a way that they do not support the child's feelings of being "damaged goods." If the child requires a future examination for follow-up treatment of a vaginal discharge or observing the healing chronology of acute genital trauma, it is best that the initial examining physician who has developed rapport with the child do that examination.

## ***EXAMINING THE CHILD***

- The child should be allowed to have a trusted adult ally present during the examination for support. Depending upon the age of the child and the ability of the child to detach from the adult ally, one of several positions may be utilized in the examination of the child's genitalia. In small children, having the child sit in the caretaker's lap throughout the examination may be most appropriate. As a general rule, one should avoid examining the child in the position in which they have been victimized. This is particularly important in males who have been sodomized. In males, the knee chest position, although offering excellent visualization, is frequently the position they have been sodomized. Therefore, the left lateral decubitus position is the most appropriate position for examination.

- In examining the female child, the supine frog leg position and/or the knee chest position offers excellent visualization of the genitalia. An examiner may have a preference for one position or another, although the use of both positions will optimize the potential for examining all aspects of a child's genitalia. Children should have their sense of modesty respected; therefore, they should be appropriately gowned and draped.
- In the supine frog leg position, separation of the labia and gentle posterior and lateral traction will open up the vaginal vestibule and facilitate visualization of the medical aspects of the labia minora, periurethral tissues, external surface of the hymenal membrane, hymenal orifice (introitus), fossa navicularis and posterior fourchette. Taking time to allow the child to relax during the process will provide greater relaxation of the pubococcygeal muscles and supporting structures of the hymenal membrane, perihymenal tissues are thus given greater visualization. In the prone knee chest position, gentle separation of the labia and superior and lateral traction on the buttocks will provide visualization of the vaginal vestibule and the structures therein. In this position, it may be possible to visualize the cervix. Before examination of the genitalia a review of genital anatomy and descriptive terminology as presented in the appendix is most appropriate.
- During the examination, the child may be asked questions to help clarify his/her perception of what happened. Statements made by the child to the physician or nurse should be noted verbatim in the medical record. The physician then attempts to corroborate the historical details with specific patterns of ano-genital trauma.
- Before examining the genitalia or anus for signs of trauma, clarify whether or not the alleged activity was penetrating or non-penetrating. Young children have considerable difficulty differentiating whether an object was placed in them or on them. A child may state that a penis was placed in them when in fact what they meant was that the labia were spread and the shaft of a penis or digit was placed between the labia along the vestibular surface of the hymenal membrane or over the anal verge tissues. In addition, the child should be asked whether or not they have been physically hurt by the activity. Those children who complain of having discomfort associated with specific acts are more likely to have findings of injury. In the intrafamilial abuse, the offender usually has little desire to physically hurt the child. If the child experienced discomfort during the activity, he or she is less likely to be engaged in the activity again. When either an adolescent family member or extrafamilial offender is involved, there is a greater likelihood that force will be utilized and signs of trauma will be found. When historical details suggest that a series of progressive activities have occurred over time without a history of discomfort, the more subtle changes associated with gentle stretching of tissues may be seen.
- All findings of acute or chronic trauma to the hymenal membrane, perihymenal tissues, hymena orifice and/or anus should be described in detail. When referring to the location of the findings, it is helpful to utilize a clock face as a reference. To improve visualization of the genital and anal structures, an adequate light source is essential. Very obvious acute anogenital trauma may heal with no obvious sequelae. When only regeneration of traumatized tissue is involved, the signs of injury may resolve in less than 72 hours. With more significant injury in which repair (granulation tissue) is necessary, the healing process is prolonged and varied, based on the extent of injury, and the presence or absence of infection and further injury. Scar tissue formation may be the

sequelae from either single or multiple episodes of anogenital trauma. Scar tissue may be quite subtle, are difficult to recognize once formed. This is particularly so in children who are prepubital. If scar tissue is present then a history of significant trauma should be sought. The degree of scar tissue formed will depend on many variables.

- When obvious acute trauma is apparent, the examining doctor should arrange for repeat examinations at appropriate intervals to document residual of the trauma. An understanding of how acute genital trauma heals and what its residual might be will help the physician interpret changes in anogenital anatomy when visualized long after the acute injury.

## ***DIFFERENTIAL OF TRAUMA IN SEXUAL ABUSE***

### ***A. Extra-genital Trauma***

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Extragenital signs of trauma are more likely to be found in extrafamilial cases of sexual abuse where physical force is more commonly utilized. Close observation of the skin for the presence of abrasions, contusions and bite marks and ligature marks should be noted. Target organs of extragenital trauma frequently include the breasts, thighs, neck, and buttocks. In addition, observation of the scalp for traction alopecia should be noted.

### ***B. Oral-Genital Trauma***

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The female or male victim, who has been engaged in performing fellatio, if forceful, may have petechiae of the palate or tears to the labial frenulum. Depending upon when the last episode of oral genital contact occurred, there may be value in obtaining oral swabs and/or nasal secretions for the presence of sperm and/or seminal products. In the male child that has been a victim of fellatio, there may be bite marks, petechiae or abrasions to the shaft of the penis, glans, or scrotum. The female genitalia following cunnilingus may demonstrate acute signs of injury including petechiae, edema, abrasions or bite marks.

### ***C. Manual Stimulation of Offender's Genitalia***

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If the child has been forced to manually stimulate the offender's genitals, it is unlikely that there will be any findings on the child's hands, although saliva or seminal products may be present depending upon when the child is examined in relation to the abuse.

### ***D. Fondling, Introduction of Foreign Body, Non-penile***

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In the female victim, the acute findings of genital manipulation depend upon the degree of force utilized and may run the spectrum of no findings at all to that of erythema, edema, superficial abrasions and/or contusions. In forceful fondling with digital penetration or introduction of foreign body into the vagina through the hymenal orifice, there may be significant lacerations and/or transection. Information

concerning the child's position, use of lubricants and the cooperativeness of the child should be obtained. In the female victim, chronic signs of abuse may be reflected by the presence of scar tissue and/or alterations in the integrity of the hymenal membrane orifices' characteristics. Trauma may be observed as healed transection distorting the integrity of the membrane edge. Most commonly residual to genital fondling and/or vulvar coitus is the complaint of burning with urination (dysuria) following the alleged contact. If the child is examined shortly after the contact, redness and edema may be apparent. If the urine is examined microscopically, red blood cells may be evident.

In the male victim, the same variables, which contribute to the presence or absence of signs of trauma in the female victim, apply. Physical findings of manual stimulation of the genitalia may include edema and/or abrasions to the penile shaft, glans, or scrotum. Examination of the anus may reveal edema, abrasions, contusions and in forceful cases, lacerations of the anal verge tissues add anal sphincter. The repeated introduction of a digit, several digits or a non-penile foreign body into the anus may not result in any chronic residual as the anus has the ability to dilate to accommodate such objects.

#### *E. Female Genital/Male Genital Contact without Penetration*

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Vulvar coitus represents penile/genital contact without penetration through the hymenal orifice. Legal definitions of penetration vary considerably. Penetration may be defined as an object being placed between the labia or through the hymenal orifice into the vagina. In young children, significant trauma will be present if an object the size of a penis is in place through the hymenal membrane orifice. However, the residual of vulvar coitus can be readily differentiated from the effects of penetrating through the orifice. Vulvar coitus can result in trauma to the anterior commissure, periurethral area, medial aspects of the labia minora, the external surface of the hymenal membrane, and the posterior fourchette. Acute findings of the penile shaft pressing against the genital tissues may result in lacerations, abrasions, erythema, and edema. Subtle signs of chronic residual may be observed as the presence of scar tissue in the posterior fourchette and on the external surface of the hymenal membrane. The presence of scar tissue on the external surface of the hymenal membrane can potentially result in constriction of the hymenal orifice.

#### *F. Penile Penetration - Vaginal and Anus*

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In the female victim, the signs of penile vaginal penetration may be quite apparent or subtle depending upon the size of the child. In a young child, the introduction of an adult penis with the average diameter of 3.5 cm. will cause significant and obvious acute trauma. In the child who has experienced longstanding intrafamilial sexual abuse, the activities may have started out by digital penetration with stretching of the hymenal membrane orifice and gradual enlargement. This facilitates the introduction of a penis at a later stage. With the use of lubricants and/or cooperativeness of the child, introduction of a penis may result in minimal acute trauma. In older children who are approaching puberty or are postpubertal, the estrogenized changes of the hymenal membrane may make it difficult to observe healed signs of trauma. Estrogen results in thickening of the tissue and changes in the vascular pattern. Estrogenized tissues also

have considerable distensibility resulting in the ability of the hymenal orifice to dilate sufficiently to accommodate a foreign body such as a penis without obvious residual.

Healed lacerations represent the chronic residual to genital trauma. Any interruption in the integrity of the hymenal membrane edge, which extends to the posterior vaginal wall, represents a healed laceration. More subtle interruptions referred to as notches or clefts may be congenital in origin or could represent a less dramatic injury. With repeated introduction of a penis caruncula hymenales may be evident. A narrow posterior rim of the hymen may be seen in some children who have experienced repeated penile vaginal penetration. When residual to introduction of a penis is observed, it most likely will be seen between the 5 and 7 o'clock position with the child supine involving the posterior aspects of hymenal membrane, fossa navicularis, and posterior fourchette.

In penetration, of either the male or female anus, acute findings may include anal spasm, tissue edema, petechiae, contusions, and fissures. Unusual serious complications of sodomy include complete transections of the anal sphincter and perforation into the rectosigmoid portion of the colon. Proctoscopic examination may reveal petechiae to the mucosa of the rectosigmoid. Children who have experienced acute anal penetration should be able to provide a history of pain on initiation of penetration, less discomfort during the act of sodomy, and considerable discomfort after the act has been completed. They also may describe clearly painful defecation and blood being evident when they wipe themselves or on the stool.

Chronic signs of anal abuse when force has not been a significant factor and lubricants have been utilized may be quite subtle and difficult to interpret without knowledge of premorbid state. When interpreting an abnormal response of the anus to traction on the buttocks, the examiner should note the presence or absence of stool in the ampulla. If stool is present, dilation of the anus is an anticipated response. Perianal venous dilation in itself is not an abnormal finding. Any interruption of the symmetry of the anal verge tissues circumferentially should be identified. Healed scar tissue may be evident within the folds of the rugal pattern. Traumatic anal tags are an uncommon residual to penile-anal penetration, but must be differentiated from congenital tags.

### *G. Accidental Trauma*

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The trauma patterns of accidental injury to the genitalia are quite different from that seen in inflicted trauma. In addition, the historical context in which the injury is explained will also be different. Acute accidental injury generally presents itself shortly after the injury occurred with the victim usually accompanied by a concerned caretaker. All children who have acute genital trauma should be interviewed alone to ascertain their story as to how the injury occurred.

This section provides basic introductory comments on the collection of forensic specimens. These procedures are applicable for any child in which there is a history of sexual assault within 72 hours. The physician has only one opportunity to obtain forensic specimens following an alleged event. Therefore,

care must be given in selecting the appropriate test and collecting the specimens in a manner, which will optimize their yield.

- **Clothing Collection**

If the child has not changed clothing since the sexual assault, it may be appropriate to have the child's clothing or portions taken as evidence depending upon what the activities were. In reports of fondling, collection of clothing will have little value. Clothing collection is of greatest value when the offender is an extrafamilial individual. Collected articles of clothing thought to have forensic value should be placed in a paper bag (not plastic) prior to submission to the NJ crime lab.

The child may have changed clothing prior to the examination. Clothing which is suspected of having seminal stains, but not currently being worn by the child, should be retrieved even if washed. Discarded diapers may have valuable forensic evidence and should be obtained if available.

- **Dried and Moist Secretions**

A long wave ultraviolet (Woods) light will be helpful in scanning the body and clothing for signs of semen which fluoresces blue green. When secretion stains are identified, describe the specific location and size of the stain.

The procedure for lifting seminal and bloodstains is as follows:

- Dried semen or blood can be gently scraped with the back of a clean scalpel blade into a paper envelope.
- Dried secretions, which cannot be scraped, should be lifted by utilizing a sterile cotton swab moistened with sterile distilled water. Note that the swab should not be soaked but just moistened.
- Moist secretions should be collected with a sterile dry cotton swab to avoid dilution. When collecting moist secretions for observing sperm motility, sterile saline should be utilized. As a general rule, two to three swab specimens from each area should be collected. This will provide adequate material for sperm identification, acid phosphatase, P30 and blood group antigen determination.

All specimens must be appropriately labeled. The air-drying of collected specimens is important prior to placing the swab into the cardboard container. Sixty minutes of air-drying is necessary to optimize preservation of the specimen and is best achieved by the use of a cool air fan.

- **Examination for Motile Sperm**

A wet mount is utilized to identify the presence or absence of motile sperm, regardless of its source (vagina, mouth, and anus). Sperm motility can be determined by a wet mount examination. Motile sperm, when present, help in timing the event.

Procedure as follows:

- Select swab or swabs (vaginal, rectal or oral) with secretions and roll swab back and forth in either one drop of saline or Hepes media to transfer material to slide. Air dry swab and place in cardboard container.
- Place cover slip on slide and immediately examine under 400 magnification for number of motile and nonmotile sperm per high powered field.
- After completing the microscopic examination, place labeled slide in appropriate sealed packing.

*The following chart reflects various survival times depending upon the location and type of evidence to look for:*

SITE	MOTILE	NONMOTILE SPERM	ACID PHOSPHATASE
Pharynx	1/2-6 Hrs	6 Hrs	6 hrs
Rectum	1/2-8 Hrs	24 Hrs	24 Hrs
Vagina	1/2-8 Hrs	7-48 Hrs	12-48 Hrs

## ***FOLLOW-UP CARE***

**E**ach victim has undergone an extremely traumatic experience and due to their young age, adolescents are unequipped emotionally and psychologically to deal with such situations. Keeping in mind the poor financial and living conditions of the majority of these victims and their family networks, these children need guidance and support from doctors and psychologists. These adolescents must receive follow-up care, to ensure they have not contracted any infections, STD's etc, and must be referred to a psychologist who can discuss the resulting trauma as well as emotional reactions with the child, and help him/her tackle the several phases of rape trauma syndrome which include adverse changes in sleep cycles, diet, bodily functions, ability to focus, and may also manifest themselves in nightmares, fear and insecurity regarding certain people or certain places, depending upon the nature of the rape. Helping him/her adjust to the new circumstances, dealing with attitudes of family members and the locality, tackling her physical and emotional reactions following the rape. Equipping the child with vital information about what to expect and how to effectively handle the situations that may arise, will greatly minimize the negative impact of the rape, as well as facilitate the child's rehabilitation.