APPROACH TO INTERPRETING PHYSICAL AND LABORATORY FINDINGS IN SUSPECTED CHILD SEXUAL ABUSE

FINDINGS DOCUMENTED IN NEWBORNS OR COMMONLY SEEN IN NON-ABUSED CHILDREN
(The presence of these findings generally neither confirms nor discounts a child’s clear disclosure of sexual abuse.)

Normal variants

1. Periurethral or vestibular bands
2. Intravaginal ridges or columns
3. Hymenal bumps or mounds
4. Hymenal tags or septal remnants
5. Linea vestibularis (midline avascular area)
6. Hymenal notch/cleft in the anterior (superior) half of the hymenal rim (prepubertal girls), on or above the 3:00-9:00 line, patient supine
7. Shallow/superficial notch or cleft in inferior rim of hymen (below 3:00-9:00 line)
8. External hymenal ridge
9. Congenital variants in appearance of hymen, including: crescentic, annular, redundant, septate, cribiform, microperforate, imperforate
10. Diastasis ani (smooth area)
11. Perianal skin tag
12. Hyperpigmentation of the skin of labia minora or perianal tissues in children of color, such as Mexican-American and African-American children
13. Dilation of the urethral opening with application of labial traction
14. “Thickened” hymen (May be due to estrogen effect, folded edge of hymen, swelling from infection, or swelling from trauma. The latter is difficult to assess unless follow-up examination is done.)

Findings commonly caused by other medical conditions

15. Erythema (redness) of the vestibule, penis, scrotum or perianal tissues (May be due to irritants, infection or trauma*)
16. Increased vascularity (“dilatation of existing blood vessels”) of vestibule and hymen (May be due to local irritants, or normal pattern in the non estrogenized state.)
17. Labial adhesions. (May be due to irritation or rubbing.)
18. Vaginal discharge (Many infectious and non-infectious causes; cultures must be taken to confirm if it is caused by sexually transmitted organisms or other infections.)
19. Friability of the posterior fourchette or commissure (May be due to irritation, infection, or may be caused by examiner’s traction on the labia majora.)
20. Excoriations/bleeding/vascular lesions (These findings can be due to conditions such as lichen sclerosus, eczema or seborrhea, vaginal/perianal Group A Streptococcus, urethral prolapse, hemangiomas.)
21. Perineal groove (failure of midline fusion), partial or complete
22. Anal fissures (Usually due to constipation, perianal irritation.)
23. Venous congestion, or venous pooling in the perianal area (Usually due to positioning of child; also seen with constipation.)
24. Flattened anal folds (May be due to relaxation of the external sphincter or to swelling of the perianal tissues due to infection or trauma*)
25. Partial or complete anal dilatation to less than 2 cm (anterior-posterior dimension), with or without stool visible (May be a normal reflex, or may have other causes, such as severe constipation or encopresis, sedation, anesthesia, neuromuscular conditions.)

INDETERMINATE FINDINGS: INSUFFICIENT OR CONFLICTING DATA FROM RESEARCH STUDIES
(May require additional studies/evaluation to determine significance. These physical/laboratory findings may support a child’s clear disclosure of sexual abuse, if one is given, but should be interpreted with caution if the child gives no disclosure. In some cases, a report to child protective services may be indicated to further evaluate possible sexual abuse.)

Physical Examination Findings

26. Deep notches or clefts in the posterior/inferior rim of hymen in pre-pubertal girls, located between 4:00 to 8:00, in contrast to transections (see 41)
27. Deep notches or complete clefts in the hymen at 3:00 or 9:00 in adolescent girls
28. Smooth, non-interrupted rim of hymen between 4:00 to 8:00, which appears to be less than 1 millimeter wide, when examined in the prone knee-chest position, or using water to “float” the edge of the hymen when the child is in the supine position
29. Wart-like lesions in the genital or anal area (Biopsy and viral typing may be indicated in some cases if appearance is not typical of Condyloma accuminata.)
30. Vesicular lesions, or ulcers in the genital or anal area (Viral and/or bacterial cultures, or nucleic acid amplification tests may be needed for diagnosis.)
31. Marked, immediate anal dilation to an anterior-posterior diameter of 2 cm or more, in the absence of other predisposing factors

Lesions with etiology confirmed: Indeterminate specificity for sexual transmission
(Report to protective services recommended by AAP Guidelines unless perinatal or horizontal transmission is considered likely.)

32. Genital or anal Condyloma accuminata in child, in the absence of other indicators of abuse
33. Herpes Type 1 or 2 in the genital or anal area in a child with no other indicators of sexual abuse
FINDINGS DIAGNOSTIC OF TRAUMA AND/OR SEXUAL CONTACT
(The following findings support a disclosure of sexual abuse, if one is given, and are highly suggestive of abuse even in the absence of a disclosure, unless the child and/or caretaker provide a clear, timely, plausible description of accidental injury. It is recommended that diagnostic quality photo-documentation of the examination findings be obtained and reviewed by an experienced medical provider, before concluding that they represent acute or healed trauma. Follow-up examinations are also recommended.)

Acute trauma to external genital/anal tissues

34. Acute lacerations or extensive bruising of labia, penis, scrotum, perianal tissues, or perineum (May be from unwitnessed accidental trauma, or from physical or sexual abuse.)
35. Fresh laceration of the posterior fourchette, not involving the hymen (Must be differentiated from dehisced labial adhesion or failure of midline fusion. May also be caused by accidental injury or consensual sexual intercourse in adolescents.)

Residual (healing) injuries
(These findings are difficult to assess unless an acute injury was previously documented at the same location.)

36. Perianal scar (Rare; may be due to other medical conditions such as Crohn’s disease, accidental injuries, or previous medical procedures.)
37. Scar of posterior fourchette or fossa (Pale areas in the midline may also be due to linea vestibularis or labial adhesions.)

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

38. Laceration (tear, partial or complete) of the hymen, acute
39. Ecchymosis (bruising) on the hymen (In the absence of a known infectious process or coagulopathy.)
40. Perianal lacerations extending deep to the external anal sphincter (Not to be confused with partial failure of midline fusion.)
41. Hymenal transection, healed (An area between 4:00 to 8:00 on the rim of the hymen where it appears to have been torn through, to or nearly to the base, so there appears to be virtually no hymenal tissue remaining at that location. This must be confirmed using additional examination techniques such as a swab, prone knee-chest position or Foley catheter balloon [in adolescents], or prone-knee chest position or water to float the edge of the hymen [in prepubertal girls]. This finding has also been referred to as a “complete cleft” in sexually active adolescents and young adult women.)
42. Missing segment of hymenal tissue (Area in the posterior [inferior] half of the hymen, wider than a transection, with an absence of hymenal tissue extending to the base of the hymen, which is confirmed using additional positions/methods as described above.)
Presence of infection confirms mucosal contact with infected and infective bodily secretions, contact most likely to have been sexual in nature

43. Positive confirmed culture for gonorrhea, from genital area, anus, throat, in a child outside the neonatal period **
44. Confirmed diagnosis of syphilis, if perinatal transmission is ruled out
45. Trichomonas vaginalis infection in a child older than 1 year of age, with organisms identified by culture or in vaginal secretions by wet mount examination, by an experienced technician or clinician
46. Positive culture from genital or anal tissues for Chlamydia, if child is older than 3 years at time of diagnosis, and specimen was tested using cell culture or comparable method approved by the Centers for Disease Control **
47. Positive serology for HIV, if perinatal transmission, transmission from blood products, and needle contamination has been ruled out

Diagnostic of sexual contact

48. Pregnancy
49. Sperm identified in specimens taken directly from a child’s body

* Follow-up examination is necessary before attributing these findings to trauma

Source: Adams et al: Guidelines for Care of Children Who May Have Been Abused

** Legal standards still require cultures, though DNA amplification tests would also be confirmatory, more readily available, and arguably more accurate