The Medical Evaluation in Child Sexual Abuse

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The Extent of the Problem

• Approximately 300,000 reports each year
  – NCANDS (National Data System)

• Meta-analysis of 22 studies with random samples concludes prevalence at 30% for women and at 15% for men
  – Bolen and Scannapieco, 1999

• Kansas ACE study in 2014; random sample of 20,000 people: 10% reported sexual abuse before the age of 18
Adverse Childhood Experiences Study

• Seven categories of adverse childhood experiences were studied: psychological, physical, or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned

• The number of adverse childhood experiences was compared to measures of adult risk behavior, health status, and disease

Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults
The Adverse Childhood Experiences (ACE) Study
Vincent J. Felitti, MD, FACP, Robert F. Anda, MD, MS, Dale Nordenberg, MD, David F. Williamson, MS, PhD, Alison M. Spitz, MS, MPH, Valerie Edwards, BA, Mary P. Koss, PhD, James S. Marks, MD, MPH
Adverse Childhood Experiences Study

- Many thousands of adults have been surveyed
- There is a graded relationship between the number of categories of childhood exposure and each of the adult health risk behaviors and diseases studied (P < .001)
- Those with four or more ACEs, compared to those who had none:
  - 4- to 12-fold increased risk for alcoholism, drug abuse, depression, and suicide attempt
  - 2- to 4-fold increase in smoking, poor self-rated health, >50 sexual partners, and sexually transmitted disease
  - 1.4- to 1.6-fold increase in physical inactivity and severe obesity.
What is the impetus for disclosure?

- 28% - exposure to the perpetrator
- 28% - were asked about a comment or behavior
- 24% - response to educational program
- 20% - tell a peer who encourages telling
- 58% of adolescents disclose in the context of anger or conflict
Presentation and Referral of Abuse Cases

• Acute
  – History of contact in the last 72 hours
  – Child has signs or symptoms
  – Refer to SANE/SART (Forensic nursing program)

• Non-acute
  – Recent disclosure of past abuse, or a disclosure of current abuse, but no contact in the last 3-5 days
  – Can be scheduled at next available time
Expectations of the Interested Parties

• Parents, law enforcement and DCF want an answer as to whether the child’s statements are true

• Primary emphasis should be:
  – the initial interview
  – assessment of the safety of the child and appropriate timing of the medical exam
  – crisis counseling for the family is crucial
The Reality

- Diagnosis is usually made on child’s history
- Genital and anal injuries are infrequent
  - Difficult to differentiate “in” versus “on”
  - Many types of abuse leave no physical evidence – tissue elasticity, external contact
  - Mucosal injuries heal rapidly and completely
  - Children often have delayed disclosures
- Physical findings are often absent even in perpetrator admissions of penetration

Purpose of the Exam

• Child’s health, safety and well-being
• Assess and document any medical findings in context of the history provided
• Address any medical conditions from abuse or unrelated to abuse
• Assess for developmental, emotional or behavioral problems and refer as needed
• Reassure and educate the child and family
The Prepubertal Genital Anatomy

- Skin folds of mons pubis
- Clitoral hood (prepuce)
- Labia majora (undeveloped)
- Labia minora
- Vaginal orifice
- Vestibular margin
- Hart's line
- Perineal body
- Posterior fourchette
- Urethra
- Clitoris
- Hymen
- Anus
The Prepubertal Genital Exam
Diagnostic Specificity of Findings


• Normal
  – Normal appearance of hymen
  – Ample posterior rim
  – Estrogen changes

• Nonspecific
  – Redness, friability
  – Increased vascularity
  – Labial adhesions
  – Hymen mounds, notches
Normal exams
Diagnostic Specificity of Findings

• Concerning
  – Narrowing of posterior hymenal rim to less than 1 mm
  – Acute abrasions or lacerations in vestibule or labia (not involving the hymen)

• Clear evidence
  – Areas with absence of hymenal tissue posteriorly (confirmed in knee-chest)
  – Hymenal transection
Concerning, but Non-Diagnostic
Diagnostic of penetrating trauma
Acute and Healed Penetrating Trauma
Testing for Sexually Transmitted Infections (STIs)

• Universal vs selective testing
• Selective testing on prepubertal children:
  – Suspect has known STI or high-risk of STI
  – Another person in household has a STI
  – Abuse by unknown or multiple perpetrators
  – Child has signs or symptoms – discharge, lesions
  – Genital injury present
  – Family or child requests testing
Testing for Sexually Transmitted Infections (STIs)

• Additional selective criteria for testing in adolescents:
  – Prior consenting sexual contact
  – SMR 3 or greater

• Most examiners do universal testing in adolescents
Sexually Transmitted Infections

• Four STIs provide strong forensic evidence if found outside of the perinatal infection period and without transfusion history:
  – Gonorrhea
  – Chlamydia
  – Syphilis
  – HIV
Evaluation of prepubertal boys

- Often have been abused in prone knee-chest position
- Use the lateral or supine position to examine the anal area
- Non-specific findings include:
  - Penile and perianal redness
  - Superficial abrasions
Penile injuries
Anal Injuries

• Specific
  – Deep lacerations

• Non-specific
  – Small tears, abrasions
  – Redness
  – Pooling of perianal venous blood
  – Reflex anal sphincter relaxation, especially if stool present
Suspected anal penetration
Non-specific anal findings
Case #1

- 6 year old Black female presents to the ED with “bleeding from the vagina”
- She woke up shortly after being put to bed at her usual time and called for her parents because there was blood on the bed sheets
- Generally healthy, she had only a recent cold and cough with no fever
- She denies anyone hurting her or touching her in a way that made her uncomfortable
Case #1
Urethral Prolapse

• Presents as a red-purple, annular, donut-shaped mass protruding at the introitus
• Can bleed minimally or profusely and is **PAINLESS**
• Rarely associated with dysuria
• Often associated with coughing and straining (e.g. constipation)
• More common in African American girls
• Treat underlying cause (cough or constipation)
• If recurrent may need repair
Resolution of the prolapse
Case # 2

• 5 year old brought to ED with active bleeding from genital area

• Child reported that she fell on her shoe at a cousin’s house where they were making videos and her cousins were telling her what to do

• Didn’t want to say what they were doing “because I am afraid I will get in trouble.”
Case #2
Case #2  Straddle Injury

• On forensic interview, she adamantly denied anyone touching her inappropriately.

• Mother recalled that the 4 girls, ages 5 to 14, were upstairs and she heard her daughter crying.

• The blood wasn’t apparent immediately.

• Child demonstrated how she turned her ankle on her wedge-healed shoe, fell and said “the shoe cut my vagina.”
Characteristics of Straddle Injuries

- Bruises usually found on the labia majora, mons pubis and thighs
- Urethra gets “pinched” between the object which is straddled and the pubic bone
- Hymen and vagina are within introitus therefore rarely injured unintentionally
- Penetrating straddle injuries usually are in the posterior fourchette
Post-operative Repair
Case #3

• 3 year old girl is referred for recurrent urinary tract infections
• Child is living with her single mother who has several men in and out of the home
• Referring physician was concerned about the possibility of sexual abuse
Case #3
Case #3  Labial adhesion

• Most common between 6 month to 6 years, but found in all prepubertal ages
• Irritation and erosion of the vulvar epithelium allows the labia to stick together and re-epithelialize
• No treatment needed unless causes urinary retention or associated with UTIs
• Estrogen cream and good hygiene
• Resolves with puberty
Labial adhesion: Examined with labial traction
Other examples of labial adhesions
Case #4

• 6 year old girl was brought by her mother concerned that the child was being sexually abused by her father from whom the mother is divorced

• Mother wants full custody with no overnight visits with father

• Child says only her mother has touched her and denies that her father has done anything inappropriate
Imperforate Hymen

• Results from incomplete embryologic development
• Estimates of incidence from 1 in 1,000 to 1 in 10,000
• Can and should be diagnosed in the newborn or in infancy with careful exam
• Frequently is not diagnosed until puberty
• Requires surgical repair prior to puberty
Case #5

• 8 year old girl was involved in a motor vehicle crash and during a thorough exam by the triage nurse in the ED was discovered to have findings that prompted a consult for suspected sexual abuse

• Child denies any current abuse, although mother reports the child was molested several years ago in Oklahoma where the perpetrator was convicted and jailed
Case #5
What is this and what should be done?
Lichen Sclerosis et Atrophicus

• Vulvar and perianal area has an “hourglass” hypopigmented pattern with atrophic skin, ulcerated and purpuric-appearing lesions
• Patients are often asymptomatic, but may complain of itching, irritation, burning and dysuria; rarely bleeding and discharge are noted
• If symptomatic can be treated with fluorinated steroid cream and avoidance of irritants
• Resolves spontaneously at puberty
Lichen sclerosis et atrophicus
Case # 6
(no history needed)
Pinworm (Enterobius Vermicularis)

• Most common worm infection in the U.S.
• While the human sleeps the female pinworm leaves the intestinal tract and deposits eggs on the surrounding anal skin
• Pinworms can migrate into introitus and cause itching, discharge and irritation
• If all else fails to improve a case of vulvovaginitis, try treating for pinworms
Case # 7

• 9 year old child is seen urgently, at the request of the primary care provider, for a painful, red rash in the genital area the day after returning from a visit to her father’s home

• Child denies any inappropriate touching
Case #7
Vulvovaginal Group A Streptococcal Infection

• Acute onset of a confluent, bright red, painful, tender rash with macerated skin in the vulvar and/or perianal area

• Usually spread by self-contamination from oropharynx or other skin lesions to the anogenital area

• Culture for confirmation
Case #8

- 5 year old girl is referred for evaluation of possible sexual abuse
- Referring physician is concerned about scar tissue in the “vagina”
Septate hymen
Case # 9

- 2 year old referred for evaluation of suspected sexual abuse because of a healed scar on the perineum
- DCF report had been made and family was being investigated
Failure of Midline Fusion

- Occurs during fetal development
- Should be diagnosed with a careful newborn exam
- Likely epithelializes in response to estrogen during puberty
Case #10

• 3 year old girl in for a well child check in the pediatric clinic and the resident noted a brown colored discharge on the panties during the exam
• Grandmother reported it had been present for several weeks
• Sexual abuse consult initiated
• Child was preverbal for interview purposes
Vaginal foreign body

- Usually self-deposited
- Most common foreign body is a wad of toilet paper
- Should be suspected if a brownish or bloody foul smelling discharge is noted
- May be able to remove with child in knee-chest position or labial traction, but usually requires sedation or exam under anesthesia
Facts About Sexual Abuse

• Most sexual abuse is perpetrated by someone the child knows and trusts

• Children should be taught the danger of strangers, but also must be given permission to tell if anyone makes them feel uncomfortable
Facts About Sexual Abuse

• The abuser is more likely to use power and authority as an adult to coerce the child.
• Secrecy, bribes, threats and the child’s fear of the unknown contribute to the abuse.
• If a child has no frame of reference regarding the nature of what is happening he/she will not tell anyone.
Facts About Sexual Abuse

• It is unlikely you could spot an abuser; however, pay attention to those “gut” feelings

• Most people who sexually or physically abuse children do not suffer from pathological mental illness

• Most abusers participate in ordinary work and social activities in the community, particularly activities that give them access to children
Facts About Sexual Abuse

- The child is always the victim!
- Any rationalization or justification on the part of the abuser ignores that person’s responsibility as the adult and is an attempt to shift blame to the child
Facts About Sexual Abuse

• Victims do not usually have injuries to confirm the abuse unless there is physical force or violence involved.

• Most perpetrators know that inflicting pain will more likely lead to discovery.

• Many children are unable to disclose the abuse right away, injuries can heal quickly and can be similar to nonspecific findings from other causes.
Facts About Sexual Abuse

• The degree of psychological trauma suffered depends upon the relationship with the perpetrator, the length of the abuse and the amount of violence

• Incest victims frequently do not want the family disrupted, nor do they hate the perpetrator, they just want the abuse to stop

• Disclosure can sometimes be more traumatic than the abuse
Summary

- A medical evaluation should be considered part of every suspected sexual abuse investigation.
- The medical evaluation is part of the therapeutic process after disclosure even if findings not likely.
- "Forensic purpose" is secondary; carefully considered so as not to damage the investigation.
- Admissibility of "hearsay" – the medical history vs. "interview".
- Examiner must be experienced, but if positive findings unlikely, child’s pediatrician or primary care provider might be most appropriate person.
Referrals

• Forensic Nursing Programs:
  – Via Christi St. Joseph Medical Center: 316-689-5252
  – Wesley Medical Center: Forensic Nursing and Child Maltreatment Clinic: 316-962-9122

• Child Abuse Pediatricians:
  – Dr. Kerri Weeks
  – Dr. Katherine Melhorn

• Consults: Call hospital operator and ask for CARE Team physician
Child Advocacy Center of Sedgwick County

- All investigative and support services take place at one facility
- Children and caregivers are interviewed and offered advocacy services
- Referrals for medical evaluations and therapy take place there
- District attorney’s office houses two assistant DA’s there
Child Advocacy Center of Sedgwick County

• Investigations are done by the Exploited and Missing Child Unit (EMCU):
  – Law enforcement and DCF joint investigations
  – Specific training and certification in forensic interviewing

• Multidisciplinary team meetings, peer review and team training assure interdisciplinary education and quality