



child & youth

Pediatric Telehealth Rounds

Today's topic:

**Pediatric Sexual
Abuse/Assault Exams
and Forensic Evidence
Collection.**

Speakers:

**Louise Murray, MD
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April 15, 2016

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**Please feel free to ask
questions!**



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Questions?

pedtelehealthrounds@cheo.on.ca

Declaration of conflict

Speaker has nothing to disclose with regard to commercial support.

Speaker does not plan to discuss unlabeled/
investigational uses of commercial product.

Learning Objectives

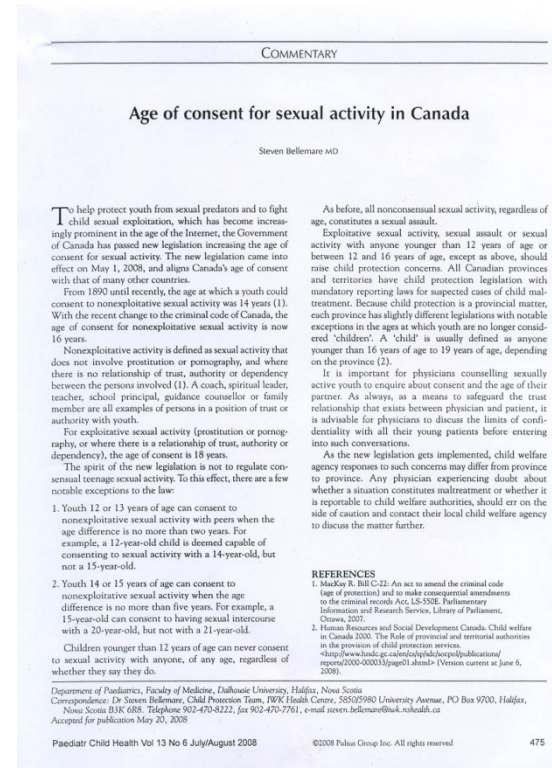
1. To formulate an approach to history and physical examination in suspected child sexual abuse.
2. To discuss documentation and interpretation of physical exam findings in suspected sexual abuse.
3. To review the Sexual Assault Evidence Kit and Forensic Evidence Collection including recent changes.

Sexual abuse of children

- Any activity with a child before the age of legal consent or beyond the child's comprehension that is for the sexual gratification of an adult or significantly older child
- This includes:
 - Oral, vaginal or anal penetration (penile, digital, object)
 - Attempted penetration
 - Sexual touching or fondling
 - Exposure/voyeurism
 - Involvement in prostitution or pornography
 - Verbal sexual harassment
- The age disparity between the victim and perpetrator is taken into account.

Age of Consent for Sexual Activity in Canada

- Federal legislation, Criminal Code
- **16 years for consenting to nonexploitative sexual activity**
- Exceptions:
- 12-13yo can consent with peers (age difference <2yrs)
- 14-15yo can consent with peers (age difference <5yrs)
- Children <12 yrs can never consent to sexual activity
- Age of consent for exploitative sexual activity (prostitution, pornography, where there is a relationship of trust) is 18



What are your legal obligations?

Provincial legislation

(Child and Family Services Act Ontario 1985, Amendment 2000, 2008)

- 1 All people, including professionals, are required to report if there are reasonable grounds to suspect that a child has suffered or is at risk of suffering maltreatment (<16 yrs).
- 2 It is an offence for professionals to fail to report suspected maltreatment.
- 3 Even physicians who have no direct contact with the child (eg. Radiologist) are responsible for reporting any suspicions of child maltreatment.



What are your legal obligations?

(Child and Family Services Act 1985, Amendment 2000, 2008)

- 4 The person who has the information upon which the suspicion is based must report directly to CAS. This duty may not be delegated to another person.
- 5 New or additional suspicions must be reported, even if a previous report has been made.



How do you report suspected child maltreatment?

Each province and territories have legislation around reporting suspected maltreatment

Phone the appropriate Child Welfare Agency where they reside

-in Ontario local CAS agency (takes reports for children <16)

-in Quebec CISSSO *(takes reports for children <18)

-in Nunavut Department of Family Services (takes reports for children <16)

*Centre intégré de santé et de services sociaux de l'Outaouais (CISSSO)

Provide as much information as possible

- Your concerns and observations
- Child's and family's identities (esp. siblings)
- Address, phone number...



Sharing information with Police

- Health care providers have no duty to report suspicions of abuse/neglect to police.
- May only disclose PHI to police when
 - Express consent is provided by patient/family
 - The law requires such disclosure
 - Warrant
 - Court proceeding
 - Duty to inform (to eliminate or reduce significant risk of serious bodily harm to a person or group of persons)



Case

- A mother comes into the clinic with her 6 year old daughter concerned that she has been sexually abused?
- How do you approach the case?



Key Points on History

- Be supportive and non judgemental
- Ideally speak to parent alone to hear about the concerns
- Ask open, non leading questions of the parent. Document question or context of statements
- You want enough information to determine if there is a concern for child maltreatment
- You want enough information to direct your immediate medical management-timing, type of contact, risk factors in perpetrator
- If you have enough information from the parent to direct your management do not interview the child – ideally minimize number of interviews and avoid contaminating future forensic interview (done by police or child welfare)

Sexual Abuse Presentation

- Disclosure
- Behavioral changes
- Symptoms
- Physical findings
- Reliable witness
- Confession



Medical History

- Basic peds Hx:
 - ID, CC
 - HPI
 - PMHx, development, Meds, Allergies
 - ROS (detailed regarding behaviour, symptoms)
 - Fam Hx
 - Soc Hx (including other children at risk, past sexual abuse in individual or family, prior CAS involvement, mental health of individual and caregivers)
- In older children, teens: menses, sexual Hx

Nonspecific findings on history which could raise the possibility of sexual abuse

▶ **Behavioural changes:**

- ▶ externalizing/internalizing
- ▶ Sexual play, sexual acting out, excessive masturbation in public and unresponsive to behavioural modification, questions about sex, questions not expected for child's developmental level
- ▶ decrease in school performance, developmental regression, behavioural problems

▶ **Physical symptoms:**

- ▶ enuresis, encopresis
- ▶ chronic abdominal pain
- ▶ anxiety, depression
- ▶ pain, bleeding

Why children don't tell

- Fear/safety concerns
- Think will not be believed
- Don't recognize as improper
- May not have communication skills
- Forget/repress memories
- Traumatizing process
- Guilt/Shame
- Fear of breakdown of the family
- Bribed to keep secret
- Cultural factors
- Don't want abuser to go to jail



Back to the Case

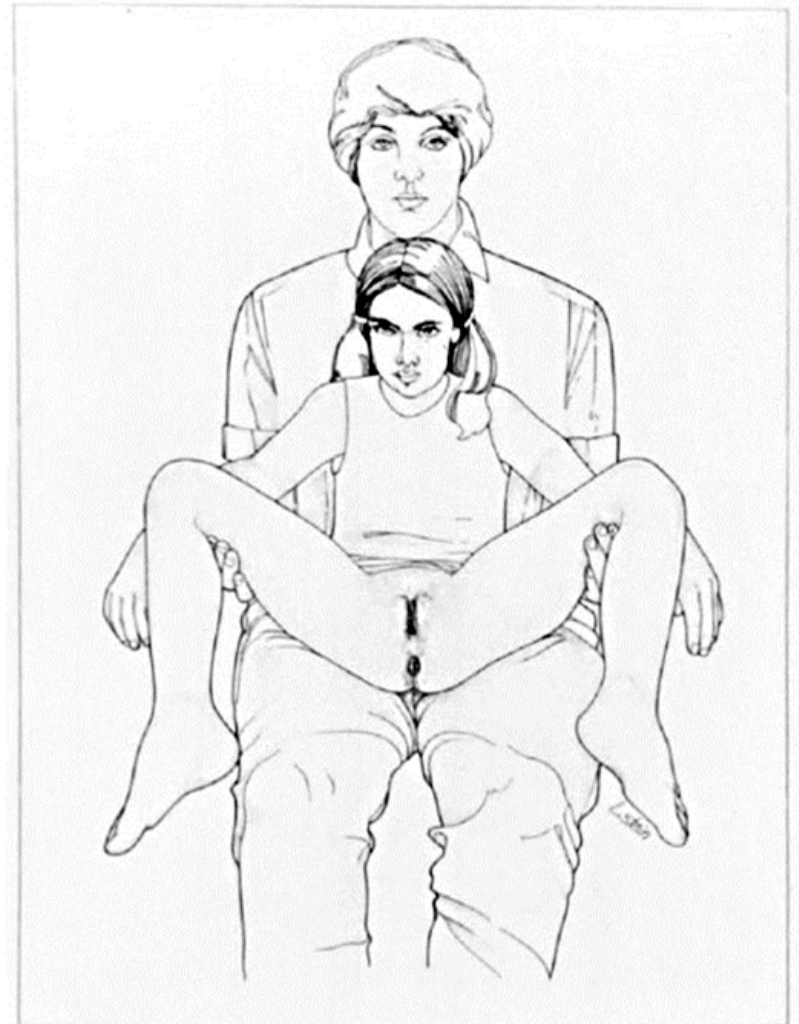


- The mother reports that Jill told her mother yesterday night that 1 week ago when he was visiting her grandfather he put his fingers inside her. It hurt. There was no bleeding. He said if she was a big girl she would be able to keep a secret and not tell anyone.

Approach to Physical Exam

- Preparation ahead of time
- Have parent/caregiver with child and engage child during exam
- Start with head to toe (looking for signs of trauma or neglect) and end with ano-genital exam
- Allow child to keep underwear /diaper/pull-ups on as long as possible
- Have parent/caregiver undress them
- Keep body covered except part that is being examined
- Ano-genital exam with proper positioning and lighting.
- External to Internal structures, Direct visualization.
- ***In prepubertal: Never touch the hymen or do a speculum exam. Hymen is extremely sensitive***
- ***Do not force an exam if patient declines***

Positioning

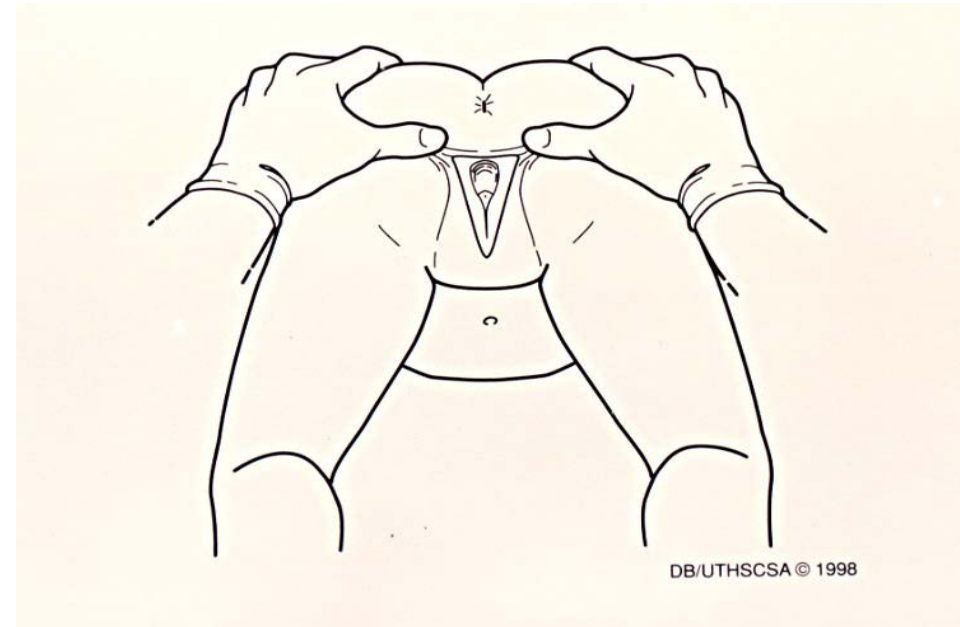
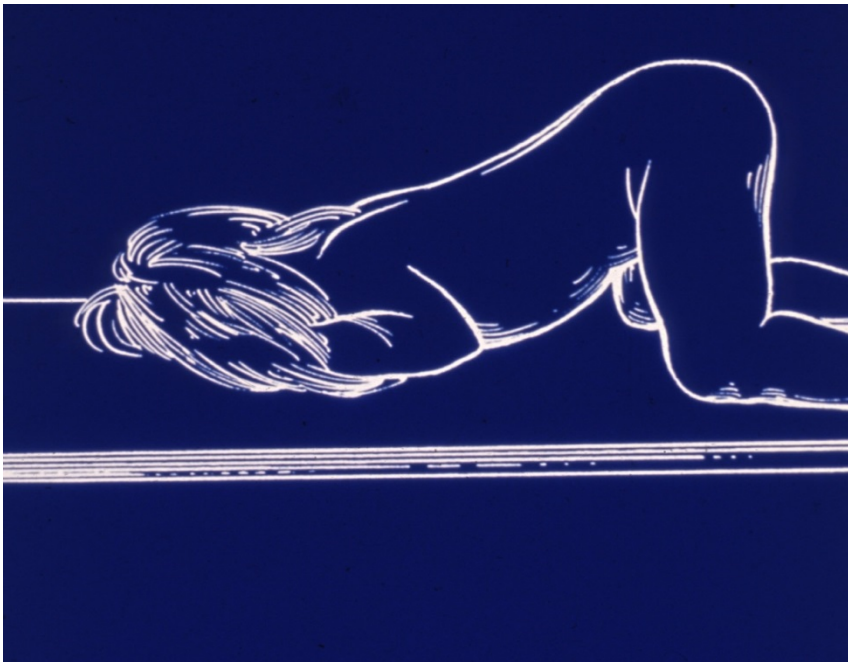


Supine Frog-Leg Position While in Mother's Lap

Hymenal changes with traction

- Amount of traction can change the appearance of the hymen and the size of the vaginal opening
- Size of vaginal diameter not a reliable indicator of sexual abuse
- Crucial to assess hymen for concerning findings

Knee Chest Position



Hymenal anatomy:

3 most common normal variations

Annular hymen

Crescentic hymen

Redundant hymen

Male Genitalia

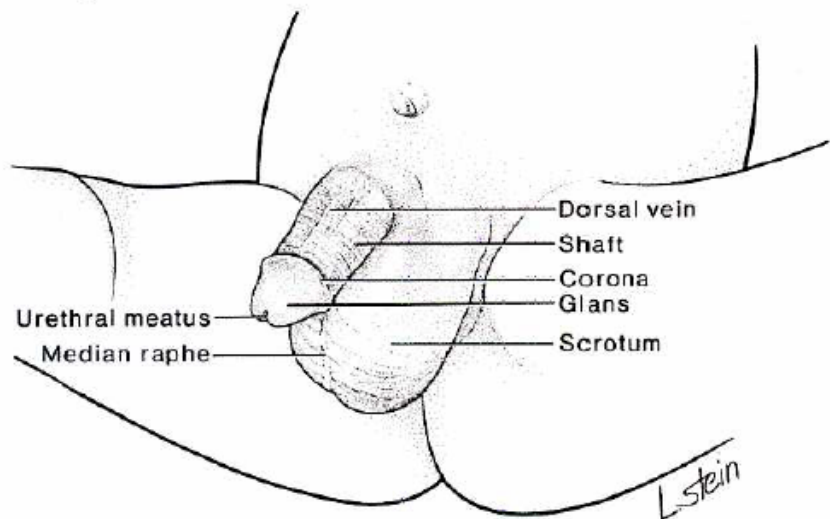


FIGURE 3.5
External structure of the male, circumcised.

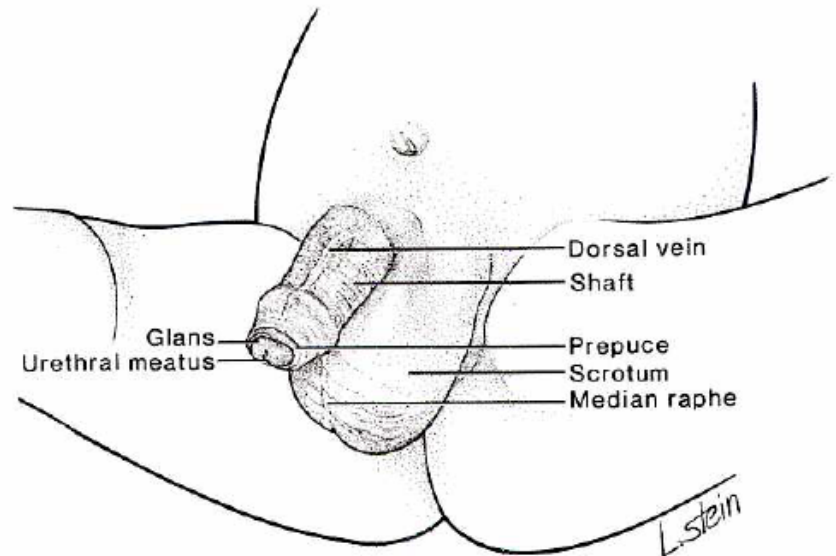
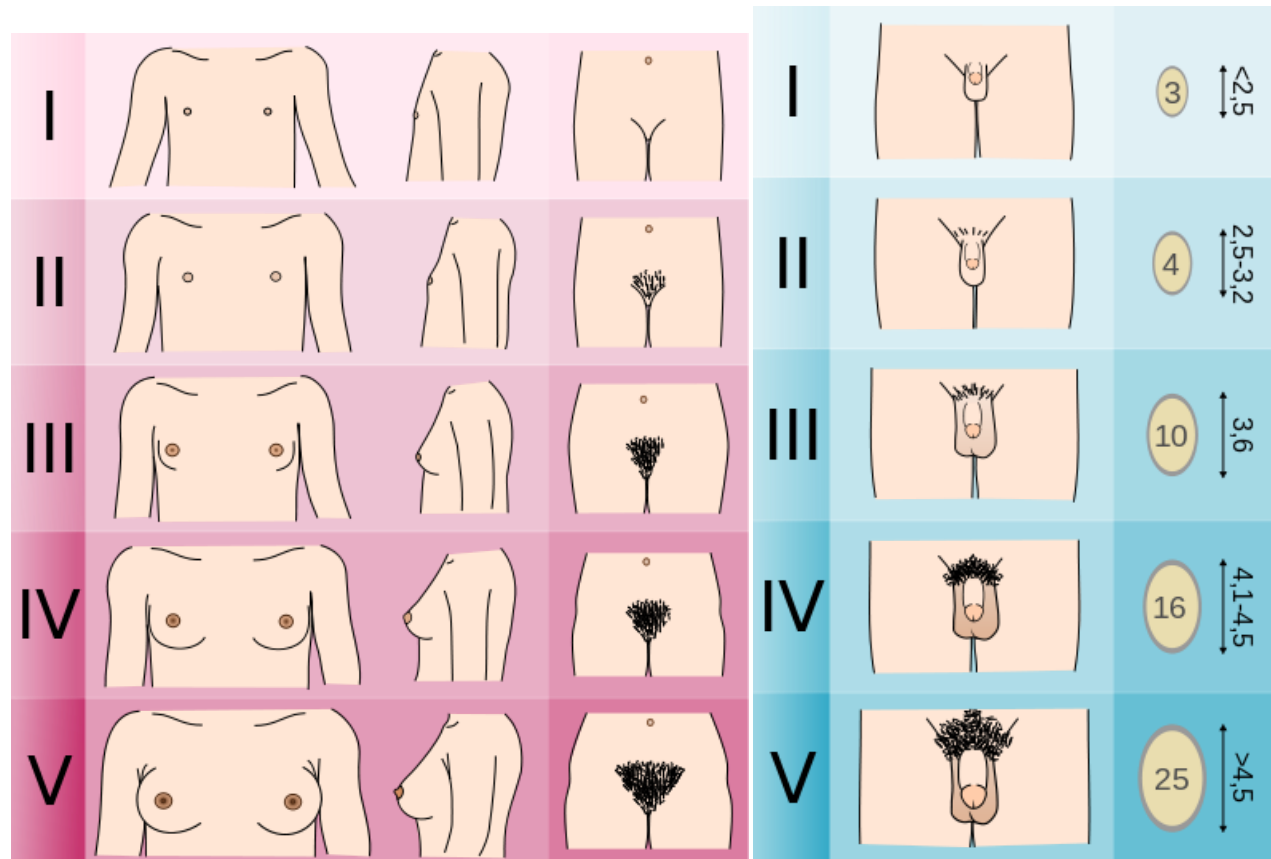


FIGURE 3.6
External structure of the male, uncircumcised.

Documentation of Findings

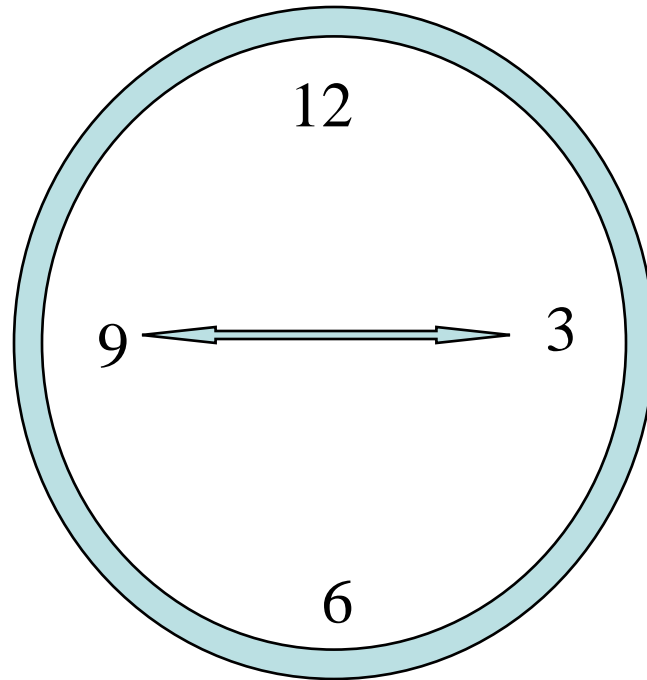
- Document general physical exam
- Document SMR



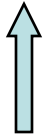
Documentation of Findings

- Describe what you see and what you can't see
- If you are unsure of what you see, state you are unsure
- Use clock face to document location of findings on hymen

Use clock face to document location of findings on hymen

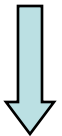


Anterior



Above 3-9 o'clock-
most anatomic
variability

Posterior



Abnormalities are
significant

Documentation

-2-

Mark all injuries on the diagrams, indicating type of injury, size, shape and colour.

FOR MALE PATIENT

PENIS _____

SCROTUM _____

ANUS _____

RECTUM _____

FOR FEMALE PATIENT (Prepubertal — see page 4)

LABIA MAJORA AND MINORA _____

POSTERIOR FOURCHETTE AND INTROITUS _____

HYMEN _____

VAGINA AND CERVIX _____

UTERUS AND CERVIX _____

ANUS AND RECTUM _____

In centres with SA nurses photodocumentation of GU exam findings.

Interpretation of physical & laboratory findings in suspected CSA

Updated Guidelines for Medical Assessment and Care of Children Who May Have Been Sexually Abused

Joyce A. Adams et al J Pediatr Adolesc Gynecol (2015) 1-7

- **1. Findings documented in Newborns or commonly seen in nonabused children- Normal variants, findings common in other medical conditions, conditions mistaken for abuse**
- **2. Findings with no expert consensus on interpretation with respect to sexual contact or trauma**
- **3. Findings diagnostic of trauma and/or sexual contact**

More than 95% of the time the physical examination is normal

- Reasons:
 - No injury due to nature of contact
 - Elasticity of tissues esp adolescent hymen
 - Injuries healed by time child was examined
 - Use of lubricant
 - Perception of penetration
- Genital Anatomy in Pregnant Adolescents: “Normal” Does Not Mean “Nothing Happened”
Kellogg, N. et al. Pediatrics, Jan. 2004; 113(1):e67-e69 Retrospective case review
 - 36 adolescents who were pregnant at time of or shortly before SA examination
 - Age range 12.3-17.8 years
 - Only 2 had definitive findings of penetration
 - 64% normal or nonspecific, 22% were inconclusive, 8% suggestive
-
- **A normal exam never rules out sexual abuse**
- **In children over 3 years of age the forensic interview is most often used to reach a conclusion**

Back to the Case



- The genital exam demonstrates a smooth, crescentic hymen. Using an evidenced based approach this finding is classified as normal.
- The genital findings in this case neither confirm nor rule out (exclude) the possibility of sexual abuse.

Investigations to Consider

- Urine R + M, C+S
- STI screening: urine PCR for G+C (dirty urine)
- Swabs (mouth, anal) as indicated, other swabs (vaginal or posterior fourchette) if discharge
- Pregnancy test (SMR 2 or higher)
- Serology for HIV, Hep B, Hep C and syphilis depending on risk
- HIV prophylaxis if indicated
- Forensic kit depending on type of contact and timing

Management:

“Every encounter should be therapeutic”

- If the child disclosed, ensure the child feels believed and supported
- Reassure child and family. If things are normal, healthy say so
- Discuss next steps
- Report to Child Welfare Agency if concerns for CSA. Inform family
- Ensure safety, other children at risk
- Offer counselling for child and family
- Manage any issues from history/physical
- STI/ID screening and treatment as necessary, Forensic kit
- Document details of your assessment
- More specialized medical evaluation if needed/wanted
- Follow up



Ottawa Resources

CHEO's Sexual Abuse/ Assault Program-

- Mon-Fri daytime: 613-737-7600 ext : 2939, after hours through the ED at 613-737-2328
- All local cases of acute sexual assault (<72hrs) or symptomatic cases should be seen in the Emergency department.

• CHEO's Division of Child and Youth Protection

- Consultants with expertise in clinical aspects of child maltreatment
- MD on call 24/7
- Counselling services available through CHEO Mental health (Abuse & Trauma Team), community resources for counselling and court preparation
- *In other centres- Local sexual assault programs, on call physicians or pediatricians, local mental health supports*

Take Home Points

- Ask open ended questions, avoid multiple interviews
- Describe what you see and what you can't see on physical exam, a patient can decline a physical examination
- Consider referral for more specialized medical assessment
- Remember your duty to report to child welfare if concerns for sexual abuse
- Investigations (Medical testing, forensic evidence collection) as indicated
- Consider mental health supports for patient and family short and long term

Forensic Evidence Collection:

- Update Sexual Assault Evidence Kit 2015
- Analysis done on Blood, Semen and Saliva.
- DNA Advantage and Limitations- Sufficient quantity needed for testing.
- CFS can determine Biological sex, mixed vs single source.
- Exclusions
- Familial Relationship
- Cannot determine mode or time of transmission.

Hypothesis-Based Testing:

- DNA powerful evidence only when used properly
- All testing decisions are based around the **context** of the case.
- A Forensic Scientist can only determine this from information provided regarding the case (info sheets in kit, Police Investigation and info)

DNA History In Canada:

- Used in Court system for 27 yrs.
- 1st Case was in Edmonton 1989
- Blood/Hair samples did not match, DNA helped clear him.
- In 1989- Ottawa Rapist 1st to be **convicted through DNA evidence.**
- 68 yr. old woman who picked him out of a line-up
- Denied allegations willingly gave DNA samples of hair and saliva.
- Positive match

National Databank :

- Became operational in 2000, 5 years after the criminal code was amended to allow Judges to authorize collection of DNA from suspects.
- 3 Cases where DNA exonerated convictions-
- **David Milgard-** 1969 murder/rape of Nursing aid Gail Millar, spent 23 years in jail. British lab tested semen found on the clothes and on her and was not a match.
- Government was ordered to pay \$10 million in compensation.

Sexual Assault Evidence Kit:

- 2002 – Previous Kit rolled out
- 2012- Updated
- 2015- New Kit
- Changed to reduce waste (many items were not used)
- Eliminate collecting items no longer relevant (less invasive)
- Update relevant collection times based on advances in forensic DNA technology

Smears and Head Hair:

- These items will no longer be collected as part of SAEK.
- Smears(a current part of Steps 2, 8 and 9)
- Head Hairs (current step 5)
- New DNA approach no longer requires smears
- Of 50 kits reviewed, no head hairs examined.

Design:

- Current standard kit divided into two components:
- **Core Kit:**
- Small, streamlined collection kit that will be used for every case.
- Contains only items that are frequently used for collection.
- **Auxiliary Pack:**
- Contains items that are less frequently used
- Contents based on actual usage as determined by their review of case information.
- One **Auxiliary pack** will be provided for every **10 Core Kits**.

Core Kit:

- Box is half the size of previous kit.
- Box label and envelope size has changed and paperwork is folded.
- Contains all kit documents, stickers, seals.
- Documents updated.

Auxiliary Kit:

- Box is slightly larger than previous kit to accommodate items for multiple examinations.
- One Auxiliary Kit contains sufficient additional items to supplement 10 Core Kits.

Auxiliary Pack:

- **Step 1- 8:** evidence drying pouches clothing
- **Step 3- 8:** envelopes for fingernail samples
- **Step 5:** Spare Blood collection
- **Step 6-1:** collection sheet and 1 envelope (deposits to pubic hair)
- **Step 6-2 :**sheet/envelope (combing pubic hair)
- **Step 6-3 :**sheet/envelope (foreign material)
- **Step 6-4:** 1 jar, 1 transport bag (foreign material to freeze)
- **Step 6-5:** 1 white bag (tampons, pads)
- **Other :**10 swabs and boxes- Spare swabs for use PRN

Seal Number/Numéro du scellé: 2U55518

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
 Agency/Agence: _____

Centre of Forensic Sciences / Centre des sciences judiciaires

Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

Seal Number/Numéro du scellé: 2U55519

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
 Agency/Agence: _____

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Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

Seal Number/Numéro du scellé: 2U55520

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
 Agency/Agence: _____

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Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

Seal Number/Numéro du scellé: 2U55521

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
 Agency/Agence: _____

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Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

Seal Number/Numéro du scellé: 2U55522

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
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Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

Seal Number/Numéro du scellé: 2U55523

Source Name/Source Nom: _____
 Location/Emplacement: _____
 Officer/Officier: _____
 Agency/Agence: _____

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Type of Sample / Type d'échantillon: _____
 Date/Date: _____
 Time/Heure: _____

STEP 3

Contents:

- 2 tapered swabs in tubes
- 2 collection sheets
- 2 self-sealing envelopes

Place evidence items directly in the Kit - discard this envelope & recycle unused items

3° ÉTAPE

ÉCHANTILLONS D'ONGLES

Contenu:

- 2 écouvillons effilés avec fioles
- 2 feuilles de collecte
- 2 enveloppes auto-adhésives

Veillez déposer les pièces à conviction directement dans la trousse - jetez cette enveloppe et recyclez les articles non-utilisés

FINGERNAIL SAMPLES

The Process:

- For each case the SANE will have CORE kit and AUXILIARY on hand.
- Hospital instructions have been changed to indicate each STEP of collection if in CORE or AUXILIARY KIT
- All items are placed in CORE kit and sealed.
- Once items in Auxiliary run out- move to another auxiliary pack.
- Items left can be moved to new Auxiliary pack.

Continuity of Auxiliary Pack:

- Auxiliary packs will be accessed for multiple cases, hospital will demonstrate continuity and authorized access.
- CFS provides seals in Aux pack that can be used to re-seal after each time accessed-Log on outside
- This space is to record the seals on the Forensic Evidence Forms.

Step 1:

- Items for collection of underwear are in **CORE** kit
- Items for collection of other clothing are in **AUXILIARY** kit.



Step 2: Oral Samples

- Swabs and swab boxes are in the **CORE** kit
- Spare swabs and swab boxes if needed are in **AUXILIARY** pack.
- No smears.



Step 3: Fingernail Samples

- Items for collection of fingernail samples are in **Auxiliary** pack.



Step 4: Skin Swabs

- Swabs and swab boxes are in **Core kit**
- Spare swabs and boxes in **Auxiliary pack.**
- In case review collection of “blind” breast swabs have been missed when history unknown or patient has not showered.
- No alternate light source needed.
- CFS has great success with breast swabs.

Step 5: Blood Sample

- Items for collection are in CORE kit.
- Spare in AUXILIARY pack as needed.
- Toxicology has made minor document changes to the Forensic Evidence Form.
- Tubes can be used past expiry date.

Step 6: Pubic Hair and Foreign Material

- Items for collection of these samples are in the **Auxiliary pack**.
- Collection of pubic hair combing is not often done. Should be done if pubic hair present.

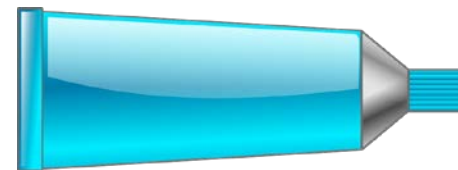


Step 7: External Genitalia Swabs

- Swabs and swab boxes are in **Core kit**.
- Spare swabs in **Auxiliary** as needed.
- Forensic Evidence form wording changed to “Did the assailant attempt or perform cunnilingus/fellatio or vag/rectal penetration on patient”. Samples for both scenarios
- Collection of external genitalia swabs for allegations of penile penetration of vagina, regardless of showering or condom use, has been increased to 12 days and increased to 3 days for penile penetration of rectum.

Step 8: Vaginal Penetration

- Swabs and boxes in **Core kit**.
- Spare swabs and boxes in **Auxiliary pack**.
- For penile penetration collect within 12 days regardless of condom use or showering/bathing.
- For digital penetration collect within 3 days regardless of showering or bathing.
- Note: No lubrication on speculum is still recommended.
- No smears.



Step 9: Rectal Penetration

- Swabs and boxes are in **Core kit**.
- Spare swabs and boxes available in **Auxiliary pack**.
- Collect for both penile and digital penetration within 3 days regardless of showering or bathing.
- If foreign material is collected, the freezer transport bag is in the **Auxiliary pack**, Step 6-4 items.

Steps 10 & 11: Buccal Sample and Urine

- Items are in **Core kit**.
- **No other changes.**



Timeline Change Summary:

- Kits can now be taken up to 12 days post assault depending on the history.
- Example would be vaginal penetration, no condom and ejaculation.

Timeline Change Summary:

External genital swab

- Penile penetration of vagina, regardless of shower/condom use **Increased to 12 days.**
- Penile penetration of rectum only, regardless of shower/condom use **Increased to 3 days.**
- Cunnilingus or fellatio, only if patient has not showered **collect up to 3 days.**
- Digital penetration of the vagina or rectum, regardless of shower-**collection up to 3 days.**

Timeline Change Summary: Vaginal Swab

- Penile penetration, regardless of shower/condom use- **collection Increased to 12 days.**
- Digital penetration, regardless of shower- **collection up to 3 days.**
- **Rectal Swab-** Penile penetration or digital penetration, regardless of shower/condom use- **Collect up to 3 days.**

Tips and Hints from CFS:

- SAEK within 12 days, 72 hrs. for pre-pubertal include clothing, DO NOT include medical documents.
- Majority of semen lost from vagina within 2-3 days.
- Examine ASAP
- Record last previous “consensual” information up to 12 days .
- **Maximum Persistence of Semen-**
- **Oral- Up to 1 day**
- **Rectal- Up to 3 days**
- **Vaginal- Up to 12 days**

Tips and Hints:

- Always collect underwear.
- Internal and External swabs taken simultaneously
- Indicate why that area was swabbed.
- **Fingernail samples**
- Take each hand separately over folded paper
- Clippings- use sterile scissors



Tips and Hints:

- **Skin swabs-**
- One swab only
- Indicate clearly why taken
- No wet/dry swabs.

- **Alternate Light Source (ALS)-**
- Not a reliable method of identifying ser
- Collect if history warrants
- Indicate if collected based on ALS



Tips and Hints:

- **Buccal Sample-**
 - Always collect (Comparative DNA analysis)
 - Discard swab only keep FTA Card
 - Include desiccant with the card.
-
- **Contamination-**
 - Be vigilant, be aware
 - Wear a mask
 - Change gloves between each collection step



Questions or Comments?

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Video-conferencers:
Unmute your system to ask a question



Webcasters:
Type your question

Thank you!

for participating in today's

Pediatric Telehealth Rounds

Join us next time:

Headaches

Dr. Van Zanten

May 13, 2016



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