

PedsCases Podcast Scripts

This is a text version of a podcast from PedsCases.com on "Child Sexual Abuse." These podcasts are designed to give medical students an overview of key topics in pediatrics. The audio versions are accessible on iTunes or at www.pedcases.com/podcasts.

Child Sexual Abuse

This podcast was written by Dr. Melanie Lewis. Dr. Lewis is a general pediatrician at the Stollery Children's Hospital in Edmonton. She is also the Director of the Pediatric Forensics fellowship program at the University of Alberta and the Year 3 Clerkship Director for Pediatrics at the University of Alberta.

Objectives

1. Describe the role of the physician in acute and historic cases of child sexual abuse
2. Describe the medical management of acute and historic sexual assaults in both pubertal and pre-pubertal children
3. Describe the physical findings associated with sexual assault

Introduction

You are working in a busy emergency department; a nurse reports to you that a paediatric patient has reported to triage following a disclosure of a possible sexual assault. No one in the department is comfortable with this presenting problem; what would be your approach?

This podcast will outline the physicians' role and management in acute and historic child sexual assault cases. In addition, the physical findings associated with sexual assault will be described. In general, very few physicians are comfortable managing child sexual assaults. This is in spite of the fact they are very common. One in three girls and one in six boys will experience sexual abuse prior to age 18 years of age.

Acute Sexual Assault

If a child presents within 72 hours of being assaulted, it is considered an "acute" sexual assault. There are three major reasons for making this distinction:

1. This is an important window for STI prophylaxis which includes: gonorrhoea, Chlamydia, Hepatitis B, and most importantly HIV which has a very narrow window to provide effective post-exposure prophylaxis.
2. The 72 hour distinction is important in pregnancy prophylaxis.

3. Finally, 72 hours describes the window in which recovery of the assailants DNA is possible and a rape kit is indicated if the patient has not bathed or showered since the time of the assault

If a pre-pubertal patient presents following an acute assault the physicians' role is to identify and manage any medical complications stemming from the assault and ensure the child will be discharged into a safe environment. It is not the physician's role to investigate the crime, but simply to take an adequate history to manage the child medically.

Take a full history from the presenting guardian. It is often not appropriate to have the child present when asking questions about the nature of the assault. Asking the pre-pubertal child questions about the assault may contaminate the investigators interview later. However, the medical needs of the child always take priority over the criminal or children services investigation. The goal is to not re-traumatize the child. Details about the lifestyle of the possible perpetrator should also be sought out if possible; such as past IV drug use, incarceration, men having sex with men, and other risk factors for hepatitis B, C, and HIV. This will help with the decision-making around Hep B and HIV prophylaxis.

Once an adequate history is taken, the child needs to be examined to rule out possible life threatening injuries (which are more common in pre-pubertal children) and document all injuries for the investigating bodies. In some areas, a paediatric Sexual Assault Team may be available to provide assistance with the examination. However, all children presenting need a timely physical exam to ensure life-threatening injuries are not present. Young children may appear outwardly entirely fine, and have sustained penetrating trauma to their vaginal wall sufficient to cause a recto-vaginal fistula or bowel perforation.

The best position to examine young children is in the frog leg position. External examination is usually all that is required unless sites of active bleeding in the vagina or cervix are not identified. If an internal examination is required as a result of suspected perforation or unidentified active bleeding, an exam under anesthesia with a consult to a paediatric gynaecologist or surgeon is indicated. During the examination, swabs should be taken utilizing the designated sexual assault kit if requested by the police. A kit should not be completed unless requested by the investigative bodies. The goal is to be as minimally intrusive as possible so taking DNA specimens at the same time as your physical exam is ideal. Do the best you can when obtaining swabs for DNA. If it is causing discomfort for the child, STOP.

A little known fact is that greater than 90 to 95% of children who have been sexually abused have absolutely no physical findings. Hence, you are likely to see very little if anything on your examination. This does not mean however that nothing has happened, simply nothing has happened that has caused tissue damage. Most instances of fondling or attempted penetration do not result in visible tissue trauma.

Pre-pubertal children should all have an opening in their hymen. The normal configuration of the hymen may resemble a half moon, a tubular structure or a circle. Definitive evidence of blunt or penetrating trauma would include: edema, bruising or lacerations to the hymen or surrounding structures or lacerations or bruising to the anus. Important to note is that an accidental straddle injury which is not uncommon, may demonstrate bruising to the labia but should not involve the hymen. If the hymen demonstrates injury, a sexual assault is by far the most likely cause unless extraordinary circumstances are described.

The history and physical exam will guide your medical management. If the child is pre-pubertal, Chlamydia and gonorrhoea prophylaxis is not required. This is due to the fact these infections are less likely to occur in pre-pubertal children related to the pH of the vagina. Furthermore, if infections do occur they do not ascend to the upper reproductive structures and result in PID, which is common in adolescent and adult women. Obviously, pregnancy prophylaxis is not indicated, unless you believe the child to be peri-pubertal meaning there is evidence of breast development and then the child should be prophylaxed to err on the side of caution. HIV and Hepatitis B prophylaxis should be considered in all cases with the risks and benefits weighed. If the assailant is HIV positive, the chance of transmission of the virus via sexual assault is less than 0.2%. Given the low risk and toxic side effects of PEP, PEP is only considered if there is significant tissue trauma, if the assault involved anal penetration, or if the assailant is believed to be high risk. The absolute outside window to give HIV prophylaxis is 72 hours. Every hour counts when a child presents. Ideally, if you are going to give HIV prophylaxis it should be within 2 hours of the assault. Hepatitis B is far more likely to be transmitted when compared to HIV. If a child is unimmunized, they should receive their first dose of hepatitis B vaccine as soon as possible, and HBIG within 7 days of the assault. Some centres omit the HBIG as vaccination is very effective.

After consideration of STI prophylaxis, pregnancy prophylaxis, and DNA collection, the child may be discharged if medically fit. This will be the majority of the patients you see. It is mandated that you ensure the safety of your patient. Ensure the assault has been reported to authorities, and that the child is not at risk for ongoing contact with the possible perpetrator. Children Services may need to be contacted if you feel the child cannot be discharged into a safe environment. Medical and psychological follow-up should be arranged. Baseline serology for: HIV, syphilis, and Hepatitis B & C should be drawn prior to the child leaving the department. Follow-up serology should be arranged for 6 weeks, 3 months, and 6 months post-assault. If a child has been immunized, hepatitis antibodies should be checked to ensure the child in fact has immunity to the virus.

If the presenting patient is post-pubertal, the medical management is similar. The history may be taken with the patient present as they are usually developmentally

mature enough to be involved in the process. Document any spontaneous disclosures and all information pertinent to the medical management of the child.

The physical exam in post-pubertal children is more difficult due to the redundancy of the post-pubertal/estrogenized appearance of the hymen. Compared to the pre-pubertal hymen, it is thicker, more scalloped, and difficult to fully visualize. Generally, acute injuries are not, however, difficult to see as they manifest as bruising and bleeding. Placing a child in the lithotomy position with the aid of stirrups may be necessary to get a better view of the genitalia. Also, in sexually experienced children a speculum exam may be indicated. If this causes any discomfort to the child, a speculum exam should be abandoned! Remember- do no harm, the kids have been through enough. If an adolescent refuses to be examined, then their wishes need to be accepted. You may be under extreme pressure by the police or parents to examine unwilling children, but you need to listen to your patient. This is only superceded if you believe the child has a life threatening injury.... which would be an extremely rare instance. If the child refuses to be examined or have DNA collection completed, don't forget the STI and pregnancy prophylaxis.

For the adolescent without allergies, Chlamydia should be prophylaxed with a one time, 1 gram dose of azithromycin. To prophylax against gonorrhoea, a one time 400mg dose of cefixime is indicated. For pregnancy, Ovril or Plan B should be utilized. Plan B has fewer side effects and is much better tolerated. If you are using Ovril, it should be accompanied by a dose of dimenhydrinate, otherwise known as gravol, to combat nausea and vomiting. Hepatitis B immunization and HBIG are indicated for unimmunized adolescents. HIV PEP should be discussed with the adolescents and their guardians. If HIV PEP is utilized, a paediatric infectious disease specialist should be involved to monitor side effects of the medication. HIV PEP involves 28 days of taking the prescribed antiretroviral drugs.

Once again, before the patient leaves the department, medical and psychological follow up should be arranged. The physician should ensure the child is departing into a safe environment and if not children services should be involved. Serology for HIV, syphilis, Hep B and C should be drawn and repeated in 6 weeks, 3 months, and 6 months.

Historic Sexual Assault

If a patient presents following a disclosure of a sexual assault which transpired greater than 72 hours ago, and may well have been years ago, the management is very different. Mostly, the family is presenting in psychological crisis rather than a medical crisis. The child is outside the window for DNA collection and STI and pregnancy prophylaxis. The crucial questions on history will be if there are any acute symptoms including: pain, bleeding, or vaginal discharge. If there are no

symptoms, the physical exam may be deferred unless the child feels it will ease their mind.

Most centres will have a child abuse team specialized in assessing and examining children who have been assaulted historically. These physical exams take greater expertise as the old injuries are more difficult to visualize. As stated before, greater than 90 -95% of children who have been sexually assaulted will have absolutely no physical findings. In the case of historic sexual assaults, this is because any injuries that may have been present heal rapidly and often completely, or the assault may not have resulted in tissue damage in the first place.

If a child does present with vaginal discharge, urine PCR for Chlamydia and gonorrhea should be obtained. This method of sampling is non-invasive and highly sensitive. The pre-pubertal hymen is exquisitely sensitive and swabs are difficult to obtain. If a pre-pubertal child does test positive for GC or Chlamydia this is diagnostic of abuse with very rare exception.

A positive culture or urine PCR for Chlamydia or Gonorrhea in a post-pubertal patient indicates sexual contact but the history will dictate whether or not the child was abused or the sexual contact can be considered consensual.

In cases of historic sexual abuse, psychological resources should be given to the family. In addition, the family may be in such crisis that they may need direction to report the disclosure of sexual abuse to the police. Also if the alleged perpetrator is a family member or has ongoing access to children, Children Services should be contacted.

Conclusion

The take home points from this podcast include:

1. Child sexual abuse is common, but few physicians are comfortable managing these cases.
2. Consider whether this is an acute or historic case as the management is greatly divergent.
3. If the sexual assault occurred within the last 72 hours, consider your medical management includes taking a pertinent history, performing a physical exam, possibly with DNA collection at the same time, STI prophylaxis, and pregnancy prophylaxis.
4. Baseline serology should be performed before the child leaves the department for Hep B and C, syphilis, and HIV and arrange follow up serology for 6 weeks, 3 months, and 6 months time. If HIV prophylaxis is initiated, an infectious disease specialist should be involved to monitor side effects during the 28 days of treatment.
5. Medical and psychological follow up should be arranged before the child leaves the department. Ensure the child is departing into a safe environment.

6. If the child is presenting with a historic case of sexual abuse, your history should seek out any acute symptoms and if not present they child may be referred to a clinic skilled in the area of sexual abuse. Again, ensure you are discharging the child into a safe environment.
7. Finally, remember the most likely finding on a physical exam of a child who has been sexually abused is NO FINDINGS. THIS DOES NOT MEAN NOTHING HAS HAPPENED.

I hope you are now more comfortable managing child sexual abuse in the office of emergency department setting. Don't let fear prevent you from providing the best possible care to your patients.

References

References available upon request.