

## **Exam Cultures for STI's as Part of Acute Forensic Medical Evidence Collection:**

**SART Listserv  
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**Issue:** Are STI cultures routinely performed as a part of medical forensic exams?

**Backdrop:** This is an issue that requires discussion among key stakeholders and needs to be well-matched to SART's philosophy and standards; along with evidence based practice.

### **Protocols for STIs: Testing or Prophylaxis**

- Alaska (Fairbanks) -
  - Prophylaxis;
  - Cultures if the patient requests them or there are signs/symptoms;
  - Patients are responsible for the cost of testing;
  - Referrals to local Public Health Department or to patients' health care providers;
- Indiana (Marion County)- Prophylaxis
- Maryland (military base) – STI testing in connection with all forensic medical exams. Provides follow up care.
- Massachusetts-
  - Prophylaxis;
  - Decision not to perform cultures based on a review of literature and after discussing options with LE, Crime lab, hospital lab, infectious disease, and Department of Health.
  - Research of statewide cases (over 150 SANES and 1000 exams per year) found that a *small number* of STI's were associated with assaults.
- Michigan (Battle Creek) -Prophylaxis
- Louisiana (New Orleans)- Prophylaxis
- Ohio (Cuyahoga County)-
  - Prophylaxis;
  - Testing performed if patients request it. Patients are educated that STI's manifest in a couple of weeks and the plan of care would remain the same if patient tested positive;
  - STI testing is done for medical purposes. It is not requested in the sexual assault evidence collection kit, except for prepubescent children;
  - Patients (or their insurer) are billed for testing;
  - If a cervix or vaginal tissue does not look healthy, or if patient is symptomatic (e.g., purulent drainage or foul odor), we consult with a physician (hospital based program). If the physician orders testing it is discussed with the patient. If the patient agrees to the care plan, then the testing is done;
  - Follow up is strongly encouraged for all patients.
- Oklahoma (Oklahoma City) -
  - Prophylaxis;

- Follows CDC guidelines and makes referrals for a 2-3 week follow-up. At that point any drug resistant strains would be picked up via testing.
- Recommends serial HIV testing at 2 weeks (if current status is unknown), 6 weeks, 3 months, and 6 months.
- SANE training includes differentiating between infection/inflammation and injury due to blunt force trauma. They present and look differently in most cases;
- Guidelines include follow-up with all victims, but frequently unable to get in touch with them;
- Hospitals would not be willing to pay for the added expense of testing. They already take a loss financially for housing SANE services.
- Texas (Wichita Falls)
  - Prophylaxis;
  - Cultures performed on all patients under the age of 12;
  - Educates patients about signs and symptoms of STI and importance of follow up.

### **Clinical Advantages of STI Testing**

- In order to provide complete medical and forensic care, cultures should be taken. It is part of the examination. There are clinical and medical-legal ramifications.
- Testing of possible STI's is important because the person is at risk. There are many resistant strains of Gonorrhea /Chlamydia and despite best intentions for prophylaxis, things can go wrong;
- If patients develop PID/infections (whether from a sexual assault or another sexual encounter), the patient could elect to sue the provider for negligence without initial culturing for STIs;
- If patients indicate problems with sexual behaviors, regardless if it is in connection with consensual sex or rape, a thorough history related to the reproductive system--including wet mounts, STDs, etc. should be standard practice;
- Frequently, it is small clinics that do not support this...but it is important none-the-less. Provisions need to be made to do testing as well as wet-mounts in order to do a thorough examination.

### **Clinical Opposition to STI Testing**

- Follow up treatment by patients is extremely sporadic. Treatment at time of exam is preferable.
- Treatment would be the same if cultures were positive. Follow up will reveal if treatment was or was not effective.
- We treat every victim following CDC guidelines unless the victim declines that treatment. We just do not test at the time of the exam. We recommend a 2-3 week follow-up for that.
- Genital redness is a nonspecific finding that does not necessarily correlate to STIs (e.g., tight jeans, allergic reactions to soap, etc).
- Genital redness may require further investigation (e.g., pain with urination, abnormal discharge, itching etc). These questions are medical in nature - not for evidentiary purposes.

### **Legal Implications: Advantages of STI Testing**

#### ***Testing as a Role and Responsibility of Forensic Examiners***

- Forensic nursing must keep the legal/justice system in mind when medically serving patients;

- Forensic nurses have an obligation to be thorough and complete in order to present the greatest amount of evidence to law enforcement.
- Forensic examiners should never decide to not collect what may be vital evidence. To ignore evidence is obstruction of the law.
- Not testing gives victims preferential treatment...and as examiners, we should not practice in this manner;
- Examinations, while only a piece of the puzzle, take part in determining the future lives of others, whether it is the suspect or the alleged victim. Examiners need to be objective and practice with an evidence based approach. Examiners need not be swayed by prosecution or defense when performing their roles.

### ***Testing as Evidence Collection***

- If cultures aren't done, important information will be lost. An absence of findings is just as important as the presence of findings. It is the full picture that matters. In the end, the courtroom will use information as it sees fit;
- The more evidence a jury has the more chance for adequate justice;
- Is it possible that Trichomonias, Chlamydia, HIV, etc. could be linked to a perpetrator? Yes. Is it possible the patient could test positive, but the suspect negative...yes. Does that mean he doesn't have the disease...no. There are faulty tests, people that do the test incorrectly, etc.....but it is evidence. It has bearing on the case.
- Advocates may think that testing should not be done because of what the results might do to their victims' cases. I've seen evidence not collected, and subsequently the alleged victim's case suffered for it because someone thought they were doing the victim a favor.
- When called as an expert witness for the defense or for the prosecution, I support STI testing in conjunction with exams

### ***Testing to Determine the Cause(s) of Genital Redness***

- Infection can demonstrate an alternate reason existing for redness of the vulva, vagina or cervix, and absence of infection in the presence of redness leaves fewer reasons for why redness may be there. Cultures and/or wet mounts can be important pieces of the puzzle to consider.
- Cultures enable forensic examiners to stipulate if the tests were negative/positive
- Cultures provide substantive information rather than relying on assumptions about what "could" cause redness/irritation;
- Chlamydia and/or Gonorrhea or bacterial vaginosis, candida, or Trichomonias can cause redness, so examiners need to rule out or rule in causes of redness. Otherwise, jurors could make deductions based on assumptions;
- Patients can pick up Trichomonias immediately after an assault so this could be a link to genital redness;
- We don't always get patients who report sexual assaults right away. Sometimes it is after the incubation period of an STD...so this is again important.
  - The incubation period for Gonorrhea is 2-7 days. If they are not tested within 96 to 120 hours.... patients may have Gonorrhea (and a resistant strain at that) and not know it;
  - Chlamydia incubation is usually 2 to 6 weeks.
  - Trichomonias can be found immediately after sexual intercourse (it is a protozoa) and then it takes 4-20 days after exposure for symptoms appear in women. Men do not usually have symptoms.

## Legal Implications: Opposition to Performing Cultures

### *The Roles and Responsibilities of Forensic Examiners*

- My primary concern is for my patient's health and welfare; not about jurors. If I am questioned about my observations in court, I answer honestly and to the best of my ability. I am a nurse not a police officer or an attorney.
- If an attorney asks me what are some other reasons for red irritated genitalia I could certainly rattle off an entire laundry list of reasons, including possible infection. I don't believe that I need to subject my patient to an out of pocket expense, to rule out infection as a cause of erythema and irritation
- Protocols for prophylaxis need to be performed without concern about what the defense will do; Examiners need to consider the patients' best interests;
- SANEs document findings and testify if it is consistent with the victim's story. Sometimes you cannot distinguish between an injury that occurred due to the sexual assault and an injury that occurred due to the consensual sex that the victim had the day before. The SANE is just one witness. Plus, research has shown that even adding colposcopy to the SANE exam does not improve prosecution.
- Any positive STI result at the time of the exam would not be related to the assault, so therefore it is not relevant to the case;

### **Prosecutor Perspective**

- If the CDC wants to renew a battle it almost won and then abandoned, then let them start their war against STIs with a less vulnerable population group than sex crimes victims;
- It is very legitimate to define testing for pre-existing STDs as outside the scope of a sexual assault exam;
- Testing for any pre-existing condition probably exceeds the scope of the patient's consent form;

## Resources

### **Centers for Disease Control: Sexually Transmitted Diseases Treatment Guidelines, 2006**

Sexual Assault and STD's page 80-85

<http://www.cdc.gov/std/treatment/2006/rr5511.pdf>

### **Implications of Inappropriate STD Testing Go Beyond Pure Diagnostics**

<http://www.asm.org/microbe/index.asp?bid=11883>

Misapplying diagnostic tests, particularly in forensic cases with legal ramifications, can be misleading and potentially harmful. The article leans more toward being against STD testing in PEDIATRIC cases than in adult, however their argument could be used in the adult population as well. That being said, if you do test for STD's with your exams, then you should know what tests your lab uses, their error rates, etc.

### **Evaluation and Management of the Sexually Assaulted or Sexually Abused Patient**

[http://www.acep.org/NR/rdonlyres/11E6C08D-6EE7-4EE2-8E59-5E8E6E684E43/0/sxa\\_handbook.pdf](http://www.acep.org/NR/rdonlyres/11E6C08D-6EE7-4EE2-8E59-5E8E6E684E43/0/sxa_handbook.pdf)

- *"Cultures and syphilis testing: In cases where prophylaxis will be given and chronic abuse is not suspected, cultures and syphilis testing are not necessary. This area is very controversial (Module - Adult/Adolescent Patient)"* (page 11 of the overview section)

- Page 61: Initial STD testing is a controversial issue. In most instances, the results of the culture will be negative, and if positive, they may or may not indicate new infection. Because these specimens are not forensically indicated, one management strategy is that no culture be taken acutely unless obvious signs of STDs are present. For chronic sexual abuse cases, obtain cultures because chronic infection may be asymptomatic.
- After 3 to 7 days, it may be helpful to take cultures that might indicate an infection that was introduced at the time of the sexual assault. Cultures should be taken if there is a high prevalence of STD and for patients for whom there is physical evidence of infection with a STD.
- Patients in whom there has been vaginal or anal penetration with or without ejaculation or oral penetration with ejaculation should be considered for antibiotic prophylaxis. All patients should be given instructions to return immediately if symptoms develop (Module– Sexually Transmitted Disease).
- Page 161: Initial STD testing is a controversial issue. In most instances, the results of the culture will be negative, and if positive, they may or may not indicate new infection. Because these specimens are not forensically indicated, one management strategy is that no culture be taken acutely unless obvious signs of STDs are present. For chronic sexual abuse cases, obtain cultures because chronic infection may be asymptomatic.
- The exception (page 109 Adult/Adolescent Patient) *"for chronic sexual abuse cases, obtain cultures because chronic infection may be asymptomatic. [Opposition to this reference from listserv was based on the 1999 publication date that may not take current forensic nursing standards into consideration and since the resource was published by the American College of Emergency Physicians]."*

***A National Protocol for Sexual Assault Medical Forensic Examinations, 2004***

<http://www.ncjrs.gov/pdffiles1/ovw/206554.pdf> 105-109

Lewis-O'Connor, A., Franz, H., Zuniga, L. (2005). *Limitations of the National Protocol for Sexual Assault Medical Forensic Examinations*. Journal of Emergency Nursing. 31; 267-270.

**Texts in support of cultures and wet mount testing:**

- The Color Atlas of Sexual Assault (Giardin);
- Sexual Assault: The Medical Legal Examination (Crowley)
- 2 volume set of "Sexual Assault: Victimization Across the Lifespan (Giardino).