Sexually Transmitted Infections (STI): Should the SANE/SAFE treat to prevent or test for STIs?

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Medical professionals, especially specially trained SANE/SAFEs, have a legal and ethical responsibility to identify and provide the best care possible for the sexual assault patients they serve (Ledray & Chasson, 2012). When providing care for the patient reporting a recent sexual assault this includes dealing with the issue of contracting a sexually transmitted disease, including HIV from the assailant. A primary component of the SANE exam includes prophylaxis for sexually transmitted infections. Offering the sexual assault patient STI prevention has clearly been considered a best practice for some time (ACEP, 1999; Ledray, 1999; USDOJ, 2004). The issue is if the examiner should also test for pre-existing STIs as the CDC has continued to recommend until just recently (CDC, 2006; CDC 2010). The clinical and forensic considerations for both practices for adult and adolescent patients will be addressed in this paper.

Prior to development of the SANE model sexual assault victims typically received care from emergency room staff that did not have the necessary training to provide specialized forensic medical care. A 2002 retrospective national review of medical records for sexual assault victims treated by non-SANE trained medical professionals found only 58% were tested or treated for STIs (Amey & Bishai, 2002). When care was provided by trained SANEs another study found 90% were treated to prevent STIs (Ciacone, Wilson, Collette, & Gersen, 2000). Unfortunately, there are still only just over 600 identified SANE programs throughout the US today (retrieved January 20, 2012,
What is the risk of acquiring a STI as the result of a sexual assault?

Since the early 1980’s contracting HIV or another STI after rape has been a concern of victims. While an early study found 36% of sexual assault victims reported coming to the hospital because they were concerned about the possibility of getting a STI from the assailant (Ledray, 1991), fortunately, the actual risk is much low. The Center for Disease Control (CDC) estimated the risk for rape victims getting syphilis is 0.5% to 3%, gonorrhea is 6% to 12%, and chlamydia 4% to 17% (CDC, 1998). Since rape victims are more likely to be treated prophylactically today it is difficult now to estimate risk in this population.

While HIV seroconversion has occurred when the only risk factor was a sexual assault, the risk is considered very low (CDC, 2006). In consenting sex the risk for HIV transmission for receptive penile-anal exposure is 0.5% to 3%; for receptive penile vaginal exposure the risk is 0.1 to 0.2%; and while there are no statistics for receptive oral exposure transmission is considered possible, so the CDC recommends post-exposure prophylaxis (PEP) should be offered (CDC, 2010).

It is also important to remember that the actual risk will vary considerably from community to community as a result of STI rates within the community. It is thus important for the forensic examiner to be aware of the actual rates within the community so this information can be provided to concerned sexual assault patients deciding if they want to take preventive medications.
STI Testing at the time of the Evidentiary Exam

**Forensic issues.** When SANE programs were established in the mid 1970’s the norm was to routinely test sexual assault victims for STIs at the time of the initial evidentiary exam and then again at follow-up. The rationale was that if victims were negative initially, then positive for an STI on follow-up, the assailant, if apprehended, could also be tested. If the assailant was positive for the same STI this could be used to link him to the sexual assault and would be helpful evidence. However, because there were so many other variables that could also account for a victim becoming positive at follow-up this has rarely been helpful forensically and in fact, the initial tests have often been harmful forensically. Positive STI results at the time of the initial evidentiary exam are used by defense attorneys to undermine the credibility of the victim. Even though every state now has rape shield laws designed to keep the sexual assault victim’s past sexual history out of the courtroom, initial positive STI tests are used by defense attorneys as “proof” that the victim in question is sexually promiscuous, and they argue that because she consented to sex in the past, the evidence should be admitted to show she was more likely to have consented in the case in question.

Testing is expensive, time consuming and requires rape victims to return two or three times for additional testing. It has also proven very difficult to get rape victims to comply (Blair & Warner, 1992). When SANE programs were established, the nurses in these programs became concerned about this practice and decided additional information was needed. In one early study evaluating this practice only 25% of victims tested in the emergency department as a part of the initial evidentiary examination returned for follow-
up testing (Ledray, 1991) and in another study only 15% returned (Tintinali, Hoelzer, & Michigan, 1985).

**Clinical issues.**

Clinically the concern was that rape victims were not returning for follow-up evaluation, so those who did contract a STI from the assailant were not being treated. In addition, SANEs learned that even though they tried to explain to the victims that initial testing only determined if they had a STI prior to the assault, when they tested negatively the victims incorrectly believed they did not get a STI from the rape, so they did not need additional testing or treatment. Based upon these misconceptions of sexual assault victims, low follow-up rates, as well as the use of positive initial results to undermine the victims credibility, the CD now recommends that the initial testing should be deferred and routine prophylactic treatment should be encouraged (CDC, 2010).

Another reason to defer initial testing is that most states require the reporting of infections of specific communicable diseases to public health authorities. These laws may be triggered if a SANE tests for STIs at the time of the forensic examination. If a patient is positive for an STI public health authorities must then be contacted to test and treat other sexual contacts of the patient.

With the advances in DNA recovery many SANE programs have decided to extend the time of evidence collection from 72 hours after the assault as initially recommended by most experts (ACEP, 1999; Ledray, 1999; USDOJ, 2004) to 96 or 120 hours after the assault or even longer. This further confounds the issue of initial STI testing. With the increased sensitivity of DNA probes used for STI testing, and evidentiary exams being performed for up to 120 hours rather than within 72 hours, a
positive test at the time of an evidentiary examination could indicate either pre-existing infection or infection detected in the ejaculate of the suspect. If STI results are reported to local health authorities the nurse should explain to the patient that a positive test does not indicate when infection occurred.

**Conclusion**

It is the opinion of this author that the risk of acquiring a STI should be discussed with every sexual assault victim. They should be provided with information about their individual risk based upon the infection rates in their geographic area, the type of assault, and the integrity of the vaginal, anal, or oral mucosa. Victims at risk should be routinely offered prophylactic treatment following the CDC treatment guidelines. Victims at high risk for HIV exposure should also be fully informed about the need to start the PEP medications as soon as possible and within 72 hours of exposure. They should also be fully informed about the side effects of the preventive medications when these are offered and every effort should be made to see that follow-up care is provided. Routine STI testing of adult and adolescent patients at the time of the sexual assault evidentiary exam should not be done. It is expensive and not helpful clinically or forensically.

It is also important for the clinician to remember that Trichomoniasis prophylaxis with Metronidazole should only be provided to patients who have not consumed alcohol within 12 hours prior. If alcohol has been consumed recently the combination will likely lead to significant nausea and vomiting (CDC, 2010). The risk of developing a yeast infection as a result of taking a high dose of antibiotics should also be discussed with the patient and medications to prevent yeast infections should also be routinely offered to those at risk.
Reference List


