

# EVIDENCE TECHNOLOGY MAGAZINE

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## Working with Assault Victims

### SOME OF THE TOPICS IN THIS ISSUE

- Utilizing DNA to solve property crimes
- How to work more closely with forensic artists
- Creating a latent-print analysis workflow
- Interview with Jennifer Pierce-Weeks, IAFN



# Forensic Photography for SANE and SART practitioners

Written by Sanford L. Weiss

**A FORENSIC NURSE'S JOB** includes a wide range of responsibilities such as providing care to victims of crime, collecting evidence, and providing healthcare services within the prison system. A unique specialty area within forensic nursing is the Sexual Assault Nurse Examiner (SANE). A SANE is a registered nurse who is trained to conduct forensic examinations and provide comprehensive, confidential, and competent care to sexual-assault patients in a hospital or medical setting.

Forensic nurses are the link between the healthcare profession and the criminal justice system. A forensic examination involves a comprehensive, whole-body physical exam that identifies and documents all signs of trauma. If the exam takes place within approximately 72 hours after the incident, the

use of a Sexual Assault Evidence Collection Kit may be included.

Evidence of sexual abuse must be properly and accurately documented and gathered to aid in the prevention of continued abuse by the perpetrators. Making photographs of the patient's anatomy should be routine in sexual-assault cases. The photographs can supplement the medical forensic history and physical findings. With the patient's permission (which must, by law, be obtained prior to an exam or photography), some agencies capture images of detected injuries as well as the normal, apparently uninjured parts of the body. Other agencies limit photographs to detected injuries. Examiners are encouraged to document and collect all evidence and leave the determination of the potential value of the evidence to investigators.

Physical and sexual abuse often leaves bruises, abrasions, lacerations, and contusions representative of the crimes. Victims seeking relief and protection from law enforcement and healthcare facilities automatically subject themselves to questioning and written documentation of their injuries. However, victims are under no legal obligation to submit to evidentiary photography without written permission from themselves or their guardians. Consent must be obtained for collection and storage of sexual-offense evidence, including forensic photography.

Once written permission is obtained, photography of a sexual-assault victim should be undertaken in the presence of a patient advocate by a trained crime-scene technician, Sexual-Abuse Response Team (SART) member, a



**Image 1**—When photographing a victim's injuries, make sure to include an overall image of the patient's hands, showing all of the injuries and/or blood.



**Image 2**—You should always drape sensitive parts of the victim's body before photography if recording details of those parts are not necessary for documentation.



**Image 3**—Try to use a longer-than-normal focal length macro lens if one is available. This will allow you to stay out of the patient's personal space.

certified SANE, or a physician trained to collect evidence of a sexual-assault. A written description and body diagrams of injuries found during the physical examination should accompany the photographs. External genital injuries should be documented using the same techniques as practiced in the proper photographic documentation of non-genital injuries. Vaginal, cervical, and anal injuries may require use of a colposcope or other similar apparatus with photographic capability.

### Assault and Abuse

Most states will have their own protocol for the collection and handling of evidence in sexual-assault cases, but the protocols for California and New York are considered fairly standard.

Guidelines for handling sexual-assault victims can be found in California's written protocol, *The California Medical Protocol for Examination of Sexual Assault and Child Sexual Abuse Victims* (2001). This document is available from the Governor's Office of Emergency Services on the Internet. See the link at the end of this article. This protocol contains the recommended methods for meeting the minimum legal standards established by Penal Code Section 13823.11 for performing evidential examinations. The forms used for these examinations are also available from the website.

In New York State, permission from a parent or guardian is required before you can take photographs of suspected child-abuse victims. The photographs become and remain part of the victim's medical chart. The images in all forms (hard-copy or electronic) are subject to the same guidelines

## Using correct methods to photograph sexual-assault victims can help supplement the medical history and physical findings.

governing the storage and release of other medical records. Facilities which are involved in child-abuse evaluations must have a published protocol for the release of records. Requests by subpoena or other legal means, and signatures of receipt, are basic elements of requirements for releasing photographs to an investigative agency. If the photographer is not available for testimony regarding the accuracy of the photographs, chain-of-custody forms may be necessary, as they are with any other type of physical evidence.

In some sexual-abuse cases, genital, anal, and oral areas may show evidence of assault. In these cases, any injuries or other evidence should be well documented. Investigators may be able to determine the occurrence of different types of sexual activity from the documentation of the effects. It may be necessary to document subtle findings using the magnification of a colposcope with a camera and the addition of specific dyes or colorants may be needed to examine and photograph magnified views of a patient's cervix, vagina, vulva, and anus.

The parts of the patient's body that must be documented may cause them personal embarrassment. You should allow patients to keep their private areas

covered until those areas are ready to be immediately photographed. Explain to the patient what is being done and why. If photographs of the face of the patient are demanded by protocol, explain that the only people who will see the images and correlate the trauma to the face are the people who need to see the images for a specific case. It is possible to minimize the distress that is caused by the photography.

### Light Sources

Daylight photography and images captured using the light from an electronic flash unit (EFU) will only document injuries that are visible to the naked eye. When using ambient illumination, be aware of the source and match the white-balance setting of the camera to the source. If multiple sources are used, match the camera's settings to the strongest source. Always include a standard color reference in at least one of the images made using a specific light source. When an EFU is used, be careful not to wash out the image by glare from a direct flash. Diffuse the built-in flash or use an oblique flash when possible.

Reflective ultraviolet (UV) photography may allow the inspection and photodocumentation of bruising or bite marks that are invisible under white-light illumination. Long-wave UV light penetrates the skin more deeply than visible light. The use of a special filter (such as a Kodak Wratten 18A) that allows only UV light to pass is placed on the camera lens. It may even facilitate documentation of trauma that has been absorbed into the skin over a period of time. (Note: Many digital SLR cameras are equipped with an internal UV/IR that may inhibit UV photography.)



**Image 4**—To avoid blurry images, do not expose images from a distance that is closer than the distance that is allowed by the camera being used.



**Image 5**—Be sure to take photographs of the specific injuries over a period of time in order to document changes in outward appearance during the healing process.



**Image 6**—Patients must always give specific consent for photography. Exceptions include unconscious patients. In such a situation, "implied consent" applies.


# PHOTOGRAPHY

Light-emitting-diode (LED) technology is comparable in performance to other forensic light sources within specific color ranges. In addition, LED technology is less expensive and more easily portable. Flashlights with LED bulbs are produced in a variety of wavelengths for specific applications. A single, high-intensity, one-watt LED is usually powered by two or three AA or AAA alkaline batteries.

Forensic light sources in the blue range (approximately 455 nm) are useful in sexual assault investigation, including the discovery and documentation of protein stains (such as semen, saliva, and urine). Forensic light sources in the purple range (approximately 395 nm) are useful for the enhancement of skin injuries (such as

bruises, abrasions, or contusions).

White, blue, and purple LED lights are the most useful colors in abuse investigation, accompanied by orange or yellow barrier goggles. Barrier goggles are used for inspection and barrier filters are used for photography to block visible light in wavelengths that may interfere with the fluorescence of evidence.

A comprehensive checklist of tips for photographing assault victims can be found on the following page. 

## For more information

To get a copy of California's protocol for handling victims of sexual assault, The California Medical Protocol for Examination of Sexual Assault and Child Sexual Abuse Victims (2001), go to [www.oes.ca.gov](http://www.oes.ca.gov) and then navigate

to Law Enforcement and Victim Services > Applications and Proposals > Forms > Medical Forms.

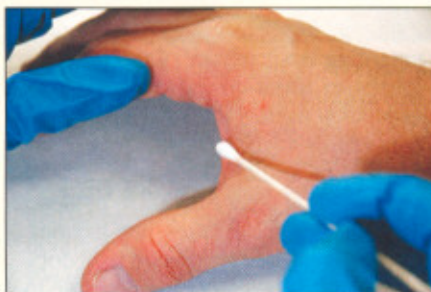
## About the Author

Sanford (Sandy) L. Weiss, BCEP, PI, is the author of several articles that were previously published in Evidence Technology Magazine. He currently teaches forensic photography for SART and SANE personnel for the University of California-Davis at the California Clinical Forensic Medical Training Center. He is also the author of the book *Forensic Photography: The Importance of Accuracy*, published by Pearson, Prentice-Hall, 2008. Sandy Weiss may be contacted by e-mail at:

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**Image 7**—Sometimes, an electronic flash unit (EFU) can cause reflections from the victim's skin, creating overexposed areas that render the photographs useless (see Image 8).



**Image 8**—If the electronic flash unit (EFU) is causing exposure problems, move the flash so that it has a more oblique—or indirect—orientation to the victim's skin.



**Image 9**—Include size references wherever they might be appropriate. Be sure to position the reference item in a non-reflective angle with the flash.

(Note: In Image 9 above, the person holding the scale was a friend of the victim. When asked to hold the scale, the friend declined to wear protective gloves. It is always advisable to wear protective gloves when working with a victim in a situation like this.)

# PHOTOGRAPHY

## Guidelines to follow when photographing a victim:

- Patients must give specific consent for photography. Exceptions may arise when dealing with unconscious patients where "implied consent" applies, or if a court order has been issued.
- You should record in the medical record the fact that photographs were taken, how many were taken, and who took them.
- Photographs are part of the medical record and should be retained with the record, not with the physical evidence.
- Notes containing the following information should be included with the photographs:
  - Name of patient
  - An image of patient's identification, if available
  - Date of the photographs
  - Name and credentials of the photographer
- Use only one memory card (or folder, if necessary) or only one roll of film per patient.
- Include an image of the patient's face for identification (if specified by agency protocol).
- Include full-body photographs for identification.
- Use a longer-than-normal focal length macro lens, if available, to keep the camera and photographer out of the patient's personal space.
- Use a minimal flash to reduce the shock effect on the patient.
- Photograph every potentially significant injury or finding.
- Include images of collected evidence, before and after collection.
- Include control images of uninjured areas on the opposite side of the patient.
- Include overall images of the patient's hands, showing possible injuries or blood.
- Include close-up photographs of hands and fingernails.
- Expose photographs with the surface to be documented in a parallel orientation to the image plane of the camera. If the EFU causes reflections on the patient's skin, move the flash to a more oblique orientation.
- Maintain a neat, non-distracting, and—if possible—neutral-colored background.
- Use a properly matched lighting-and-sensor sensitivity combination to yield images with the most accurate color.
- Include color references in images where color accuracy is important.
- Include size references where appropriate. Always use a legible scale with sufficient dimensions to enable the rectification and matching of images to physical objects.
- Use an L-shaped scale where appropriate to facilitate image rectification.
- Position the scale and color references into a non-reflective angle with the flash.
- Images should also be exposed without references in place.
- Expose images from overall, medium-range, and close-up distances. This applies for each area of evidence.
- To avoid blurry images, do not expose images from a closer distance than allowable by the camera being used.
- Expose images of three-dimensional injuries (such as bite marks) or pattern injuries from multiple points-of-view.
- Include recognizable body landmarks in the overall images to enable viewer recognition.
- Drape sensitive parts of the body when they do not need to be exposed for documentation.
- Expose images left by restraints if visible.
- Use UV illumination to inspect for and document injuries that may not be visible under normal illumination.
- Capture appropriate stereo-pairs of body parts and injuries for 3D imaging or analysis.
- If an injury requires specific treatment (such as bandaging or suturing), expose photographs of the injury before and after treatment.
- Expose photographs of injuries over time, to document changes in outward appearance during the healing process.

### Photo Credits:

Images 1, 2, and 9 are from Christopher Cali, Crime Scene Investigator with the Naperville (Illinois) Police Department.

Images 3 and 8 are from Aric Dutelle of the University of Wisconsin-Platteville.

Images 5 and 6 are from P. J. Schoebel, Dodge County (Wisconsin) Medical Examiner.

Images 4 and 7 are from the author, Sanford J. Weiss.