Communities across the country have worked hard to improve their response to sexual assault. Many have collaborated to create specially trained Sexual Assault Response Teams to provide victim sensitive services while still meeting the forensic needs of the criminal justice system. San Diego began implementing such a program in 1992. We worked hard to improve our coordinated response to sexual assault. Therefore, many of us were shocked and more than a little defensive when a victim of a serial rapist complained about the forensic exam to the media and anyone else who would listen. The victim was angry that following her brutal attack and rape in her own home, she was transported to the SART hospital where amongst other things, a nurse plucked 40-60 hairs from her head and pubic area. The victim was horrified at the process and questioned its purpose. In all honesty, I couldn’t respond with a reasonable answer. Although I began working with sexual assault in 1985 as a Child Abuse investigator, I had never been involved in a case or even heard of a case where a victim’s known hair standard was used to solve a case.

The San Diego Police Department began a DNA lab in 1992. We use PCR (polymerase chain reaction) DNA analysis. In some circumstances, following the initial PCR work, samples are sent to private laboratories for RFLP testing to confirm the identity of a suspect we are investigating. However, because DNA is commonly used to confirm the identity of a known suspect or corroborate a victim’s allegations, we rarely have problems using PCR results alone at trial.

Unfortunately, at this time, DNA work is still time consuming and expensive. A recent inquiry by the National Commission on the Future of DNA indicated that there are about 180,000 rape kits waiting to be analyzed by crime labs. This is actually the tip of the iceberg since many law enforcement agencies have not yet provided their officers with training on potential sites for DNA evidence and proper collection methods. In addition, officers are still evaluating whether a forensic examination should be obtained for the sexual assault victim based on their understanding of serology, i.e., penetration and ejaculation versus potential DNA sources such as saliva regardless of penetration and ejaculation. As a Sex Crimes supervisor, I know that most rape kits are never even looked at or analyzed before they are disposed of after the statute of limitations expires, generally six years in the State of California.

After talking to Sexual Assault investigators, forensic examiners and lab personnel, we discovered that neither the investigators nor examiners truly understood the difference between biological DNA evidence and trace evidence such as hairs and fibers. We learned that doctors and nurses plucked the victim’s hair because that was the way our protocol was designed in the late 1980’s. Most examiners NEVER received feedback from the crime laboratory about evidence they collected. Many assumed that
“something” was happening to the evidence they collected. I recently reviewed a SART training manual that states, “Obtaining foreign hair samples is rare. When foreign hair is collected, however, hair must also be available from the victim for comparison with any foreign hair that is found in or on her body. For this reason, examiners pluck 15 to 20 head hairs and pubic hairs. Others cut hairs rather than pluck, since many laboratories do not analyze the root.” The question is, why would any crime laboratory expend resources to analyze the root of a known hair standard?

Let’s apply this logic to an actual sexual assault investigation. An unidentified assailant sexually assaults a woman. The suspect uses a jar of Vaseline to provide lubrication during the assault. A hair is later found in the Vaseline. Both the victim and suspect are Caucasian. The hair could be analyzed by the crime laboratory to determine if it could be a hair from the victim and if not, possibly the suspect, if one has been identified. This is associative evidence. The following is an example of the report we would receive from a lab request to analyze hair. “The hairs collected from the scene are medium to dark brown in the root area, changing to light brown/blonde down the length of the hair to the tip. These hairs appear to have been chemically treated. All of the roots are stretched indicating forcible removal. One hair in this sample is a dark brown/black curled hair, less than one centimeter in length. This hair has a root. The hairs recovered from the crime scene were compared to the hairs collected from the victim (the victim’s hair standards were snipped). The long, light brown/blonde hairs are similar in color, including the presence of color treatment, diameter, length and overall condition to the head hair standard from the victim. The single dark brown/black hair is not similar to the victim’s hair standard.”

The suspect in this case was arrested while the rape was still in progress. The suspect was extremely violent, yanking a chunk of hair out of the victim’s head during the assault. In an attempt to prevent any question by the jury at trial, a request for trace evidence work was made to corroborate the degree of force employed by the suspect during the attack. Although it is possible that the one unidentified hair belongs to the suspect, (or someone else) the identity of the suspect is not in question and would be a waste of valuable resources to analyze for DNA. Known reference samples, usually blood or saliva, taken from both the victim and a suspect, would always be used to compare to any unknown source.

If the suspect had fled and was not identified, DNA analysis of the root would have been valuable to determine a DNA profile that could later be entered into CODIS, the National DNA databank. Once a possible suspect was identified through DNA, the investigation would have to continue to link him to the actual assault.

When we first began discussing the issue of snipping a sexual assault victim’s head and pubic hair (as close to the skin as possible) versus plucking, Trace Evidence Criminalists were vehemently opposed, arguing that they need the longest hair possible to compare to any hairs that might have been found at a crime scene. Scientifically this is true. However, the reality is hair evidence/trace evidence is rarely used in a sexual assault case. Nationally, suspects who are acquainted with the victim commit almost 8
out of 10 sexual assaults. These cases have absolutely nothing to do with the identification of the suspect but whether the sexual assault was consensual as most often claimed by the defendant. Additionally, crime scene evidence will first be analyzed for potential DNA evidence. If DNA evidence is found, in most circumstances, there is no reason to even look at potential trace evidence unless the investigator is trying to link cases, crime scenes, etc.

Although we were told that there are one or two labs in the country that can obtain DNA results from hairs without roots, no one I spoke to knew the names of the lab(s) nor could they cite a case when they had used this technique. Apparently it is a very expensive procedure. We argued that the one in a million possibility did not seem to justify the trauma of plucking 40 to 60 head and pubic hairs from women and men who had just been through a heinous and humiliating assault of the worst kind. Most Criminalists will still argue that hair should be plucked. In the end, absent a compelling example of how a plucked hair had solved a case, we advised our crime laboratories that in the event they ever needed a plucked hair from the victim, we would immediately obtain them from the victim at their request. All sex crimes investigators know that except in the case of a sexual homicide, no sexual assault is going to be prosecuted without the victim. If the victim leaves the jurisdiction or is later unavailable for trial, the case will not proceed and the hair is again insignificant. San Diego County changed its protocol approximately five years ago. The San Diego Police Department has 11 Sex Crimes detectives and they investigate almost 1,000 felony sexual assaults per year. Interestingly, not one Sex Crimes detective has ever been asked to reschedule an exam to obtain the plucked hair standards so many argue are so desperately needed. So the question is, do you snip or pluck a sexual assault victim’s head and pubic hair?

Archambault, J., *Do You Snip or Pluck a Victim’s Head or Pubic Hair?*, *Sexual Assault Report*, Civic Research Institute, Volume 3, Number 5, May/June 2000, p 65, 79-80.