

A Comprehensive Approach to Sexual Assault Investigation

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Editorial

Sexual violence is a widespread problem. When the word heinous crime falls upon your ears the first name which pops in our mind is rape. Undisputedly the most gruesome and heinous of all crimes against any women [1]. Even since civilizations came into existence to curb the crime, administrators and law makers have tried relentlessly by making appropriate laws related to it, but in vain. The biggest problem faced is the proper investigation and potential misuse of these laws by unscrupulous elements, limiting the penalties attached to it. Many assaulters get less or no jail term due to less knowledge of doctor which causes loss of evidence during physical, sexual examination of rape victim.

Detecting sexual abuse requires a high index of suspicion and expertise. Odontologist should be aware that oral or dental injuries may be result of physical or sexual abuse that sometimes can be confirmed by laboratory findings. Moreover, injuries inflicted by one's mouth or teeth may leave clues, regarding the timing and nature of the injury, as well as the identity of the perpetrator. Odontologist should carefully observe and document the findings as they are expected to be knowledgeable about such conclusion and their worth [2].

Bite marks are complex injuries, and their detection and analysis depend upon an understanding of the mechanisms involved. Bites are frequently seen in cases of child abuse, sexual assault, assaults. In child abuse, the marks are seen anywhere on the body such as arms, hands, shoulders, cheeks, buttocks and trunk. Sexually oriented bites can be caused at any parts of the body namely breasts, neck, shoulders, thighs, abdomen, pubis or vulva. In assaults can be anywhere on the body. Perpetrator bite marks can be also found on foodstuffs [3].

A teeth mark caused by humans on tissue, food items or other objects by teeth either alone or in combination with other mouth parts. Human bite are semicircular or crescentic with central area of ecchymosis caused due to front teeth with a gap on either side due to separation of upper and lower jaw, should be differentiated from animal bite whose morphology of the teeth is different.. There are class characteristics to be considered, such as which type of tooth inflicted the bite, e.g., incisor, cuspid, etc. Class features of incisor is rectangular, canine is triangular or rectangular, premolars and molars is spherical or point shaped. In addition, also seen are individual characteristics, such as rotations, fractures, or missing or extra teeth. In sexual assault, sucking action during bites reduces the air pressure in the centre and produces multiple petechial hemorrhages due to rupture of small capillaries and venules [4].

Use of new technologies and especially the laser scanners assist in the production of fast and easy 3D models of the dental cast. According to the needs of the Dentist this nondestructive method enables to production of sections. The digitized dental cast is available for further examination due to the non-destructive nature of the methodology.

Teeth represent an excellent source of DNA material because they can resist extreme condition. Saliva washings are to identify or exclude assailant from 'secretor' status who exude blood group substances in the saliva and can also be a source of DNA for analysis and comparison with a suspect. With the advancement in technology methods like PCR allows amplification of even highly degraded DNA.

For visualization of suspected healed skin injuries, alternative light sources such as UV range, infrared, etc., can be helpful.

Sexual violence associated with negative health outcomes throughout life [5]. Victims often suffer from both physical and emotional pain. Counseling from a doctor can help a Sexual Violence trauma patient. Even meditation and spiritual healing can be helpful. Shanti is sanskrit word for peace. Shanti can help us begin to see all situations in our life as positive experience because we have the opportunity to grow from our challenges, often even more than our triumphs. When we begin to see situations that could be viewed as failures and tragedies as opportunity to grow, we find less in life to be fearful about. Shanti can be invoked by chanting Om Shanti, Shanti, Om Shanti, Shanti Om Shanti, Shanti.

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