

Odontology Section – 2004

F43 Custom Dental Jewelry Links Suspect to Attempted Homicide

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After attending this presentation, dental practitioners should be aware that certain segments of society have custom-fabricated dental jewelry made and that this jewelry can be used for both identification purposes and in cases where ownership is contested. Furthermore practicing dentists should investigate with their own licensing authorities the legality of this practice in their jurisdiction.

This presentation will impact the forensic community and/or humanity by making the forensic community aware of dental jewelry as items of potential identification.

The author presents a case in which custom dental jewelry provides a link between a suspect and a victim of an assault with a deadly weapon. The victim of the incident attended a social occasion sporting an upper and lower custom-cast gold-colored partial overdenture. At the social function the victim was approached by two adult males who suggested that he part with his new teeth and donate it to them. The victim vehemently refused and a verbal and later physical altercation broke out. The gold-clad victim was assaulted and received a gunshot wound that resulted in a spinal cord injury. Following this it is alleged that the two male suspects physically removed the jewelry from the victim's mouth and left the social function. The altercation was witnessed. The victim was left permanently paralyzed from the chest down. Some time later the Toronto Police Service apprehended one of the suspects who by chance happened to be wearing what he called his new custom made gold teeth. The police arrested him and seized a set of custom cast gold teeth from him. Upon closer inspection the teeth were partially-filled with paper tissue in an attempt to make them fit better to their alleged new owner. The question posed to the forensic dentist was: Whose teeth fit the custom cast jewelry - the victim or the accused? The author suggested to the police that the jewelry not be "tried-in" to the victim's mouth because this would necessitate sterilization which could have damaged the material and because it could be contended that the teeth were forced onto the victim's teeth.

In order to determine whose teeth these were the author visited the victim in the paraplegic hospital and examined his teeth and the inside of the cast teeth recovered from the suspect. The victim said that the teeth were his. The author made vinyl polysiloxane impressions of the victim's teeth and subsequently poured these in ADA type IV dental stone. In addition the tissue was removed from the inside of the casting and composite resin (Z-100, 3M corporation, Minneapolis Minnesota) was flowed into the inside of the teeth and cured with a light-source. This positive was then recovered. The nature of the metal used for the casting was not determined. After recovery the casting was tried onto the model of the teeth and it fit well. Additionally the composite resin was compared to the stone model. These bite marks in gold resulted in a report which definitively linked the victim to his own teeth and left the suspect with some explaining to do.

After the case work-up the author contact the provincial college licensing authorities who advised him that this procedure may constitute the illegal practice of dentistry in as much as the devices were not produced by a licensed dentist. Following this the author located Internet sites which provide custom fitting decorative overdentures. At the time of writing the author has elected to not report the maker of the over denture pending the outcome of the trial.

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