



F12 Dental Ethnic Mutilation

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After attending this presentation, attendees will understand how dental mutilation may help identify a victim. They are a sign of identification between the tribes and even within a tribe. For this purpose, a software location of different types of mutilation still practiced today was established.

This presentation will impact the forensic science community by demonstrating how to identify a victim outside the conventional methods of identification based on data characteristics of the different ethnic groups still existing in the world.

The tooth is a particularly powerful symbol. Its exceptional hardness makes it possible to resist the vagaries of time, even over many hundreds of years. Thereby, it has become a symbol of strength, power, and even eternity. The use of intentional dental mutilations in humans only constitutes one chapter of a larger history, the one of body mutilations on the skin (tattoos, scarifications...), the genitals (castrations, excisions...), the feet (deformities, toe cutting...), the neck (the giraffe women), or the head (deformity of the skull...). Dental mutilation can be described as a voluntary partial or full amputation of one or several teeth mainly of the maxillary or mandibular incisivo-canine teeth.

Although customary dental mutilations are disappearing, they can still be observed in many ethnic groups in Africa and throughout the world. These mutilations, under very various forms from strategic dental extractions to modifications of the shape of the tooth or covering with diverse materials, are highly varied and are of great interest. There is no doubt that these mutilations have several characteristics: standards of beauty, initiation rites, warrior symbols, cultural, and religious character, in a wide meaning or symbolism. Distinguishing signs for some, religious or ethnic for others, the dental mutilations and sometimes the dental adornments can assist in the identification of an individual when one has no dental record or ante radiographs (which unfortunately happens in many countries).

The originality of this topic is in the presentation of software specifically created to associate a dental mutilation to an ethnic group, in relation to a country in order to identify the dental mutilation(s) with the goal to the identification of the individual.

As examples, there are different shapes of dental cuts existing in Africa and Indonesia:

- The shape of a saw with two separate tips: ethnic group of the Bakougnis in Gabon
- The shape of a saw with 2 or 3 contiguous tips: Congo, Togo
- The shape of an axe: Tchad
- The shape of a tip: the bantou and pigmy ethnic groups of Congo, the Mossi ethnic group of Burkina Faso
- The shape of niches: the Dzems ethnic group of Gabon
- The straight shape: Bali (Indonesia)
- Creation of inter incisive artificial diastema by avulsion between the maxillary and mandibular central incisives: the Massais ethnic group in Kenya, the Wolof ethnic group in Senegal, and the Hereros ethnic group in Namibie.

These multiple dental mutilations have been observed for centuries and in all areas of the world. In this presentation, dental mutilations still occurring today have been regrouped by classifying them according to their type (additive or subtractive dental mutilations) and according to their geographic location. The goal for the odontologist is to determine the ethnic origin of the human with the observed mutilation. For this, odontologists will be able to use the described computer program by completing the different sections describing the mutilation to determine the corresponding ethnic group as well as its geographic location.

Teeth Mutilation, Ethnic, Dental Identification