

THE ADMINISTRATION OF THE RISK FACTORS IN EMERGENCY SITUATIONS –THE VICTIM’S IDENTIFICATION

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Abstract

Because the legal-medical identification is done by the comparing the relic toward the known recorders, there are three important demands for identification of a person which are: to be unique, to be stabile, to be recorded as belonging to a known person. The teeth carry out these demands, because they can be used for the odonto-stomatology identification.

Key words: odonto-stomatology identification, teeth, dento-maxilar apparatus.

The dento-maxilar apparatus is compound of structures told as numbers, form, size in agreement with the develop periods of the person having morphological, normal and pathological particularities, to be added whit treatment markes (local conservatory, radical or of substitution). All these allow the establish of an individual dental formula.

After a rigurous odonto-stomatology examinations you can establish the followings: age, sex, rase, profession, habitate and social-economical level.

The process of dental identification includes several levels: preparation, after death examination (oral-autopsy), the localization and putting in safe the dental before death cards, comparison the before and after death information, the final raport. I must say the fact that a dental identification is considered to be positive only when the before and after death information is compatibile and offers unicity.

GENERAL CONSIDERATIONS FOR THE TEETH

The teeth develop from the epiblastul stomodeal and from mezenchimul subjacent, dental to man being heterodontal (formed from teeth with different shape and function). The man has two dentals: the first dental part is formed of 20 teeth which are temporal teeth and ten teeth for each dental archway and the second dental part that has thirty-two permanent teeth (16 for the superior archway and 16 teeth for the inferior arcway).

The first dentitions begins to appear when the baby has 6 months after birth and it is held till the age of 2 – 2.5 years.

Characteristics: homonym teeth appear as pairs on each archway, the first teeth that appear are those on the inferior archway, the temporal teeth are smaller than the final ones, have a blue colour and the glaze is transparent, the roots are small and diverge; the loss of the temporal teeth is done as they appear (through a process of resorption finished around the age of 12 years).

The chronology of eruptions of the teeth:

- between 6-8 months inferior central incisors
- between 7-9 months superior central incisors
- from 8-10 months inferior lateral incisors
- from 9 to 12 months superior lateral incisors
- between 12-15 months the first inferior molars
- between 14-16 months the first superior molars
- from 17 to 19 months the inferior canines
- from 18 to 20 months the superior canines
- from 20-22 months the second inferior molars
- from 23-26 months the second superior molars.

The second dentition:

The coming of the permanent teeth is done in four levels:

- the first period is characterized by the appearance of the first molars, by the age of 6;
- the second period, when the central incisors come, by the age of 7-8 years, lateral incisors at 8-9 years, premolars at 9-12 years and the canines at 11-12 years;
- the third period is of the appearance of the second molars, by the age of 12-14 years;
- the fourth period, tied with the appearance of the third molars, at 16-30 years.

Each tooth is formed of two parts:

- the root represents the implantation place in the dental ridge, which can be unique for example at the frontal teeth or multiple for multiple for example at the lateral teeth;
- the crown represented by the free space of the tooth has five faces: mesial (median oriented), distal (oriented to the temporo-mandibular articulation), buccal (toward hall), lingual (toward the mouth cavity), occlusal (represented by the triturant face of the crown).

The temporal dentition:

Right

Left

5.5 5.4 5.3 5.2 5.1	6.1 6.2 6.3 6.4 6.5	superior
8.5 8.4 8.3 8.2 8.1	7.1 7.2 7.3 7.4 7.5	inferior

The permanent dentitions:

Right

Left

1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1	2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8	superior
4.8 4.7 4.6 4.5 4.4 4.3 4.2 4.1	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8	inferior

THE ODONTOLOGICAL IDENTIFICATIONS

The Odontological Identification represents an identification method after the dento-hallway component and it is done through: teeth expertise, of the maxilare, of the mandibul, soft parts of the face, and also on the marks let on dead bodies or delict bodies. This can be done on the person, deads, antedearth odontological documents (towards the being data we meet two types of methods: comparative and rebuilding).

For the isolated teeth will be establish: if they belong to the temporal of permanent dentition, the type of the tooth and the place on the dental archway knowing that for the maxilar teeth the incisive are bigger; the canines have a bigger crown; premolars have two cuspizi, one palatinal, rounded and a hallway one, sharper; the molars have three roots: 2 hallways and one palatinal and the shape of the crown as a quadrilateral; the mandibular teeth have the following group characters: the incisive are smaller, the canins have a smaller crown, premolars have one single root and the molars have two roots: mezial and distal and the crowns are long mezio-distal.

For identification is followed:

- the kind of the specie for the human origin pleods the heterodontion, the big dimensions, the crown and the root put in vertical place.
- the establish of the etny and the age using different methods: Gustafson method which uses six criterious of dental becoming old and especially the rusty, paradontoza, the aposition of the concrete and of the secundar dentition, the radicular resorbtion and the radicular translucidity. Other methods of finding the age: the microscope method with slobber, the method for scanning at electronic microscope, looking for the peripulpar dentition.

- the establish of the the sex by evidention of the fluorescence of the chromozom Y in the cells 'nucleus of the dental pulp, Bequain discovered a method based on moduls.
- the establish of the social level (the quality level of the dental works), of the habits (markes of cigarretes, coffee) and of the job. The using of the oclusive edge of the frontal teeth at the clothes maker, shoe-makers, specific colours of the teeth at those person who work in toxic places; the action of the physic factors on the teeth. It was seen that keeping in mind temperature the teeth were exposed, the dentition catches a specific colours, as if at 100-300 centigrade the dentition is brown, at 300-400 it is black and at 400-800 it is blue, not saying that at 900-1400 centigrades it is pink.

In the same time Dechaume and Derobert made a clasification for the modifications of the teeth under the fire action and high temperatures; the effects of the time from the funeral upon the teeth is different because of the place where they sat. The teeth kept in the ground are pink, and in the same cases they can become mobile and they can fall down easily. If the ground is smooth the teeth have after 2-300 years a chalky aspect.

CONCLUSION

1. The Forensical Odontological Identification, represents a used method in the following situation: bodies in corruption, carcasses, dead bodies (having the head part), unknown deads, and situations when it is necessary the verify of identity (ex. murder), when are storus or flood, or even calamities.
2. The Identify Process includes some specific levels:
 - The preparing when the dentist will be informed about the case.
 - The after-death examination (oral autopsy) when they can find 3 different situations: bones, carcasses, burned bodies, disabled bodies, identifiable bodies.
 - The obtain of the recorders for the before death dentition.
 - The comparison between before and after death information.
 - The final raport.
3. A dental identification is considered to be positive when the data of before and after death offer unicity.
4. It is important to be a mixt team for the identification of the deads, a team formed of forensic doctors who complete the identification acts, made the extern consultation of the death body (together with the team of criminal police), they establish the cause of death, discover the wounds, necessary elements for identification (old brokenes, treatment marks). They assure the collection of the markes and prooves for the

- lab. The policeman ask the witness, examine the material proves; the criminalists examine the external body, take amprens, photos, work together for the painting of the portret; the dentist make the x-rays of speciality, collect necessary pieces, write the existent date in specific formulares; other specialists like surgeous, plastic surgeous, antropologists, man of lab's.
5. Because of the resistance of the dental structures, even in severe disables, carcasses, burned bodies, the forensic odontological identification represents a good method of identification.

REFERENCES

1. Beliș V., - Îndreptar de practică medico-legală. Ed. Medicală, București, 1990
2. Beliș V.,- Tratat de medicină legală, vol. I și II, Editura Medicală București, 1995
3. Derobert L., - Medicine legale, Flammarion Medecine- Sciences, 20, Paris 1974
4. Dragomirescu V. T.,- Tratat de medicină legală odonto-stomatologică, Editura All, București, 1996
5. G. Mihalache, S.Florian,- Medicină legală- Curs, Editura Treira Oradea 1999
6. Matei V., - Actualități în medicină legală–Note de curs, Timișoara, 2001
7. Moraru I., -Medicină legală, Editura Medicală, București, 1967
8. Panaitescu V., -Metode de investigație în practica medico-legală, Editura Litera, București, 1984.
9. Radu C., Mihalache G., - Standard model of collective accidents approach, III rd Congress of the Balkan Academy of Forensic Sciences, Constanța 2005
10. Radu C., Mihalache G., Buhaș C., - Forensic approach în mass disasters, Revista Română de Medicină Legală, vol. XIII, nr. 2 iunie 2005
11. Radu C., Mihalache G., Pusta C., - Standard identification card of the bodies resulted în catastrophes and collective accidents –III rd Congress of the Balkan Academy of Forensic Sciences, Constanța 2005.