



F23 Dental Age Estimation - The Norwegian Approach

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The goal of this presentation is to learn about a special system of dental age estimation used in Norway and the importance of the expert's opinion. Learning about the Norwegian system of age estimation of young refugees using this system is also an objective.

This presentation will impact the forensic science community by possibly changing strategy in the examination and reporting similar cases of age estimation. It may also change the opinion of the role of the forensic dental expert in a case.

After attending this presentation the attendees will understand some of the principles of the Norwegian system of dental age estimation and the philosophy behind it. It will also be possible to understand the Norwegian system of age estimation of young refugees claiming to be below 18 years.

The presentation's impact on the forensic odontology community may be a reevaluation of the role of the forensic odontology expert. It may also have impact on the way dental age estimation will be performed and reported.

The approach involves a lot of trust in the forensic expert and his/her judgment and it will be explained why. The Norwegian system is not only a reporting of findings on radiographs and compared with tables. It involves the taking of a history (anamnesis) of the person to be examined, if living. Any diseases which may have impact on the teeth should be registered. Also the state of nutrition, especially in childhood, and any special problems with the teeth as well as how the teeth are kept and cleaned will be registered.

A clinical examination by the expert is then performed and the general state of the teeth including attrition and color and recession of the periodontal ligament is registered. The teeth present are also registered and this ends in the expert's clinical assessment of the age. Then, necessary radiographs are taken according to the techniques used for calculating the age.

The radiographs are then examined and the results in the age calculation will be reported. The expert must then, if deemed justified, change his first opinion on the age and formulate the final conclusion. In this conclusion the age is only given in whole years and after 20 years in 5 year intervals. Instead of a standard deviation, which always will be incorrect, it will be assessed how likely the given age may be and how likely the alternative age may be.

Finally, it will be described how this works in the examination of young asylum seekers to Norway who claim to be below 18 years.

As a form of quality assurance the reporting is done according to the IOFOS recommendations and the report is signed by two experts who must agree upon the conclusion.

Age Estimation, Norwegian System, Forensic Dental Expert