

DENTAL AGE ESTIMATION OF ASYLUM SEEKERS IN SOUTHERN ITALY

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ABSTRACT

In Italy, as in other western countries, unaccompanied asylum seekers deemed to be under 18 face a very different path through the immigration system from that experienced by adults. Generally adults are subject to immediate deportation or detention in jail, while minors are processed through the juvenile system, where detection is not mandatory, they will often have access to educational programs and may be granted a residency permit.

The Section of Legal Medicine of the University of Bari was approached by Immigration Police authorities and Justices of the Peace to explore the possibility of examining unaccompanied asylum seekers, who claim to be below 18 in order to assess their ages. Age estimation is performed by a group of forensic pathologists and odontologists, inaugurating a joint consultation. The dental age estimation protocol described, along with examples from four cases are set out later in this document.

In Italia, come negli altri Paesi occidentali, gli immigrati clandestini minorenni non accompagnati sono considerati per legge regolari o meglio inespellibili. I soggetti adulti sono sottoposti a procedimenti amministrativi di trattenimento e respingimento, mentre a coloro che sono riconosciuti minorenni è consentito il soggiorno compreso l'eventuale educazione scolastica.

La Sezione di Medicina Legale dell'Università di Bari è stata contattata dalla Polizia di Frontiera e dai Giudici di Pace del Tribunale di Bari con la richiesta di poter visitare gli immigrati clandestini che si dichiarano minorenni al fine di verificarne l'età. La valutazione dell'età è stata effettuata da un gruppo di medici legali e odontoiatri forensi, inaugurando un'inedita consulenza collegiale. Infine sono descritti quattro casi e la procedura odontologico-forense attuata.

Keywords: age assessment, asylum seekers, radiological, dental findings

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INTRODUCTION

The increasing volume of, and subsequent complexities resulting from migratory flows in the broader context of globalisation has led to a range of problems, such as the protection of human rights and disease control, but also the identification of those with the right to apply for refugee status, and the age assessment of unaccompanied minors. Italy is a magnet for immigration from other Countries bordering the Mediterranean sea, as the Italian coasts are within easy reach of these, especially during the summer months.

In Italy, as in other western Countries, unaccompanied asylum seekers deemed to be under 18 face a very different path through the immigration system from that experienced by adults. Generally adults are subject to immediate deportation or detention in jail, while minors are processed through the juvenile system, where detection is not mandatory, they will often have access to educational programs and may be granted a residency permit.

The Section of Legal Medicine of the University of Bari was approached by Immigration Police authorities and Justices of the Peace to explore the possibility of examining unaccompanied asylum seekers, who claim to be below 18 , in order to assess their ages

A group of forensic pathologists and odontologists performed this evaluation relying on the skeletal maturation as seen on an X-ray of the wrist, the ilium and an

orthopantomograph, together with background information and clinical examination of each individuals.

MATERIAL AND METHODS

In this study 4 male individuals, coming from Afghanistan, deemed to be minors were examined during November 2006 at the Medical Legal Institute at the Policlinic in Bari. They were all held in a Temporary Reception Centre in Bari. Each examination was performed by a forensic pathologist and a forensic odontologist, and the results were given in the same day of the examination. For the purpose of this case report only the forensic odontology procedures are described.

The four individuals were interviewed for background information, with the help of a translator, and then went on a clinical, dental and radiological examination. Oral mucosa and teeth were examined and major caries, restorations, teeth displacements and degree of attrition registered on an odontogram form. Finally, the dental examination ended in a visual assessment of the age based on the teeth.

After the clinical and dental examination, X-rays of the left hand, the pelvis for iliac crests and an OPG were taken using digital X-ray devices (Fig. 1-3). Then the age of the individual was calculated from the root development and mineralization of third molars using tables from South Africa by Harris and Nortjè, from Sweden by Kullmann et al. and from Finland by Haavikko (Fig. 4). The techniques employ a visual guide to establish the

level of crown and root development and then a simple scale for mean age estimation based upon analysis of the development of third molars.

IOFOS guidelines for quality assurance were considered for the dental age estimation.

RESULTS

The four individuals resulted to be one minor, K.W., age 16 (Fig. 3, 4, 5), and the other three adults of over 18 (A.A.), over 20 (M.M) and over 21 (U.F.) years of age. The results of our examinations were given within about two hours of the assessments being made. Written and detailed reports were delivered to the Justices of the Peace within two weeks. These reports included the X-ray reports.

DISCUSSION

Dental and bone testing procedures are used by physicians, anthropologists, dentists and other forensic experts to assess the age of living individuals. The methods used rely on the skeletal maturation as seen on an X-ray of the left hand and wrist, clavicle, ribs and third molar teeth. For purposes of the dental age estimation the eruption, mineralization and root development of third molars as shown on the X-ray is considered together with a clinical examination. Most studies on wisdom teeth calculate only probabilities for an individual to be under or over 18 and do not reach 100% confidence. Moreover dental age research suggests that children of differing racial and ethnic

background may well develop bones and teeth in a somewhat different manner. Some systemic conditions can cause delay in tooth eruption, while extraction of permanent teeth will cause the earlier eruption of teeth posterior to the extracted ones.

For this reason age estimation remains an expert opinion based on the extrapolation of different procedures

FINAL REMARKS

Age estimation of unaccompanied minors is a fundamental principle of human rights and human dignity. In order to achieve and maximize effectiveness of the age assessment process, implementation of international standards, but also the inclusion of forensic odontology is needed. This can be achieved by placing greater emphasis on the role of the forensic odontologist and promoting co-operation among forensic pathologists and radiologists, as the accuracy in the age estimation process can be achieved only using multiple indicators. Finally more population studies for specific geographic and ethnic groups is needed.

Dental and medical professions' ethical codes suggests one should give the child the benefit of the doubt if the exact age is uncertain.

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Fig. 1. K.W., male, X-ray of the left hand (age under 18).

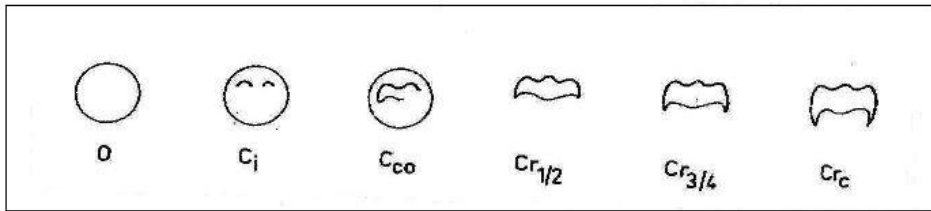


Fig. 2. K.W., male, X-ray of the medial clavicles (age under 18).



Fig. 3. K.W, male, Orthopantomograph (age under 18).

CROWN



ROOT

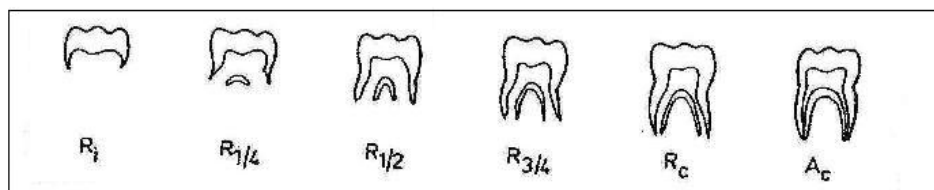


Fig. 4. Schematic drawings of the developmental stages of molar teeth (Haavikko, Academic dissertation Helsinki, 1970).