

Standards For Permanent Tooth Emergence in Sri Lankan Children

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It is essential to have adequate knowledge of timing and pattern of emergence of permanent teeth for diagnosis and treatment planning in pediatric dentistry and orthodontics. Mostly the information on the age of permanent teeth emergence used in clinical and academic requirement in Sri Lanka is mainly based on American and European standards. Several factors have been identified by the studies done in the past in relation to determine the timing of tooth emergence of permanent teeth such as gender, ethnicity, environment, socioeconomic and other secular factors. The aim of the present study was to establish the pattern and emergence time of permanent teeth in children in Sri Lanka. A cross sectional study was conducted with 3321 school children in six provinces of the country. Children were randomly selected from each school from age 5-18 years including both genders. Oral cavity was examined using a mouth mirror and a probe with natural illumination and erupting stages of each permanent tooth were recorded. All permanent teeth except the third molars were included in the assessment. Females showed earlier eruption of teeth except for the central incisors with statistical significance ($p < 0.01$). There was no any significant difference in contra lateral teeth in tooth emergence. All the mandibular teeth erupt earlier than their maxillary counterparts except premolars. Males showed early eruption of central incisors in left side of the mandible before eruption of the first permanent molar. Females showed early eruption of canines in the mandible before eruption of the first premolar. Furthermore, second premolar emerged into the oral cavity before eruption of canine in maxilla. The results of the present study provide reliable references for the emergence of permanent teeth of children in Sri Lanka.

Key words: Permanent tooth, eruption time, Sri Lanka