Evaluation of age-related changes in dentition of terrier dogs

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Abstract
Teeth eruption and wearing, especially incisors and canines, are the most practical parameters used in the clinical and physical examination of the animals. This study aimed to evaluate age-related changes in the dentition of domestic dogs in Ahvaz, Iran, to determine a relationship between arrangement of teeth and age of dogs. The present study was conducted on 173 Terrier dogs referred to the Veterinary Hospital of Shahid Chamran University of Ahvaz, which had a birth certificate. The animals were divided into 7 age groups of 1: 0 - 2, 2: 2 - 8, 3: 8 - 18, 4: 18 - 36, 5:36 - 60, 6:60 - 120 and 7: more than 120 months. The age estimation was presented based on dental profile and compared with the ancestral age. The crown length of incisors and canines were measured in the left maxillary hemi arch using a digital caliper, followed by imaging. In this study, computer and statistical studies were performed on the dental profile, correlation between crown length and age, as well as teeth wearing rate, and dental morphology. A comparison of crown length of incisors in each group showed that teeth I1, I2, and I3 had the minimum to maximum crown lengths, respectively. The correlation of estimated age with ancestral age in the studied dogs was very significant. This study showed that age assessment using teeth is one of the most important practical and true methods for age estimation in dogs.

Key words: Age estimation, Tooth, Teeth arrangement, Teeth wearing, Terrier dogs

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References


