

MEASUREMENTS OF GINGIVAL SULCUS/CREVICE DEPTHS IN MONGREL DOGS

**M.L.A.N.R. DEEPANI, R.A.D.E.INDRAJITH*, INDUWARA GOONERATNE, AND
D.D.N. DE SILVA.**

*Faculty of Veterinary Medicine, *Faculty of Medicine, University of Peradeniya.*

Periodontal Disease is the general term used to denote inflammatory disease of the periodontium viz alveolar bone, cementum, gingiva and periodontal ligament. Studies carried out in different countries reveal that periodontal disease is a common disease among animals and that it is the leading cause for the mortality of teeth.

Measurement of periodontal pocket depth is considered to be a good clinical parameter to assess the degree of the periodontal condition. Information of normal gingival pocket/sulcus depths is required for comparison/interpretation of the periodontal condition, as in the progression of periodontal disease there is "pocket" formation due to inflammation and loss of attachment. Although it is reported that average normal gingival sulcus depth is 1.5 mm in dogs, data is not available for Sri Lankan animals. Hence, a study was planned and carried out with a view to establish normal gingival pocket depths in dogs in Sri Lanka. This paper, however reports measurements of a sample of mongrel dogs only.

Twenty six (n=26), one year old, healthy, males and female mongrel dogs attending to the veterinary surgical unit of the faculty of Veterinary Medicine during five working days were selected. Four dogs were excluded from the study due to the presence of inflammatory signs in the gingiva and other diagnosed illnesses.

Gingival sulcus depths in mesial, distal, lingual/palatal, buccal were measured using a calibrated periodontal clinical probe and documented. Following permanent teeth were examined to obtain measurements; Upper left and right central incisors, lower left and right central incisors, left and right mandibular first molar, right and left maxillary first molar, left and right upper canines and left and right lower canines. (Twelve indexed teeth were measured in each dog selected). The average normal gingival sulcus depth obtained was 2.04 mm in this sample.

A hypothesis testing was done on the results observed. Null hypothesis is that the average gingival sulcus depth in mongrel dogs in Sri Lanka is equal to 1.5 mm. Alternate hypotheses are that average gingival sulcus in Sri Lankan mongrel dogs is not 1.5mm, and that the average gingival sulcus depth of mongrel dogs in Sri Lanka is more than 1.5 mm.

A statistical t- test was done and there was no statistical evidence to believe that the average normal gingival sulcus depth of Sri Lankan dogs is 1.5mm. There was statistical evidence to accept that the average gingival sulcus depth of Sri Lankan mongrel dogs was more than 1.5 mm.

To generalise these findings, further studies are needed with a large sample.