

COMMENTARY

ESTHETIC CONSIDERATIONS IN INTERDENTAL PAPILLA: REMEDIATION AND REGENERATION

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The review article relating to Esthetic Considerations in Interdental Papilla is current and interesting. The authors discuss relevant literature from the orthodontic, periodontal, and restorative aspects. Facial harmony, tooth shape, tissue profiles, root divergence, occlusion, habits, and skill of the treating dentists all relate to the end result. The authors are to be commended on this extensive review; however, final records at completion of treatment are not necessarily the end of the end point for patients. It is important to emphasize that a full mouth periodontal evaluation before and after all phases of treatment is paramount to successful active and maintenance treatment. This should include evaluation of attachment levels and areas of gingival recession. A wonderful esthetic result attained at 17 to 22 years of age may not last a lifetime. How long will the results of careful treatment planning and attention to detail last? When searching the literature in terms of patient ages, long-term documentation of patients treated with orthodontics, periodontal therapy, restorative dentistry, resulting in an optimum esthetic and functional result are infrequently found. How do these patients appear at age 40, 60, 80, and yes, even into their 90s? An unanswered question is, how does advancing age affect esthetics?

We have numerous occasions to examine patients in the so-called “golden years.” Most have papillary deficiencies in the esthetic zone, crowding of mandibular incisors, drifting teeth, occlusal wear, and attrition, as well as cervical erosion. By esthetic standards they are not perfect, but many are happy with their smile, and with age, the majority of our senior patients wants to eat comfortably, stay out of pain, and is not interested in the so-called perfect smile, although many do want whiter teeth.

Desai and colleagues¹ studied age-related changes related to smiles. The areas of interest were upper lip length at smile and repose, upper lip thickness at smile and repose, maxillary incisal display at smile, interlabial gap height at smile, smile index, percentage of buccal corridors, intercommissural width at rest, smile height, and smile arc. Their major finding was that as a person ages, the smile becomes narrower vertically and wider transversely. The dynamic measures indicate that the muscles' ability to create a smile decreases with increasing age.

Others analyzed lip line heights and age effects in an adult male population during spontaneous smiling, speech, and tooth display in the natural rest position.² The sample consisted of 122 randomly selected male participants from three age cohorts (20–25 years, 35–40 years, and 50–55 years). Lip line heights during spontaneous smiling were reduced by approximately 2 mm. In older participants, the mandibular lip line height also changed significantly, and teeth were displayed less during spontaneous smiling. Mandibular tooth display in the rest position increased significantly. Upper lip length increased significantly by almost 4 mm in older subjects, whereas upper lip elevation did not change significantly. Significant increasing lip coverage of the maxillary teeth indicates that the effects of age should be included in orthodontic treatment planning.

The smile, as related to overall periodontal health, was studied to determine whether periodontal health/disease affects psychosocial outcomes in the smiling patterns of subjects and their smile-related quality of life.³ Twenty-one patients in a periodontal graduate student clinic (4 males and 17 females; average age: 50.38 years; age range: 24–82 years) were included in the study. The periodontal health of the subjects affected their smiling patterns and their smile related to quality of life. Poor periodontal health may prevent adults from expressing positive emotions, which, in turn, can impact their self-concept as well as their social interactions. It is interesting to note that in this study there was a wide variation in participants' ages, tending to indicate that as patients age, they remain interested in having an esthetic smile. From a brief review of the literature, it appears that patients of all ages value their smiles. A healthy

periodontium, excellent orthodontics, restorative dentistry, and awareness of patients' age are important considerations when making a diagnosis and treatment plan. Irrespective of patient age, cast gold restorations as well as cast ceramic restorations appear to stand up well over time.^{4,5}

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