EVALUATION AND PREVALENCE OF GINGIVAL PIGMENTATION IN INDIAN POPULATION- AN EPIDEMIOLOGICAL APPROACH

By

DR. E. MANASWINI

Dissertation submitted to the
Dr. NTR University of Health Sciences,
Vijayawada, Andhra Pradesh.

In partial fulfillment
of the requirements for the degree of

MASTER OF DENTAL SURGERY (M.D.S.)
IN THE SPECIALTY OF
PERIODONTICS

Under the guidance of
DR. P. KRISHNAJANEYA REDDY (READER)

DEPARTMENT OF PERIODONTICS

SRI SAI COLLEGE OF DENTAL SURGERY
VIKARABAD

APRIL 2010-13

Background: Gingival pigmentation has assumed an important role in perio-esthetics and plays a pivotal role in restorative dentistry especially prosthodontics. To provide a rational basis for clinical situations, an understanding of the evolution and distribution of gingival pigmentation becomes necessary. The aim of the present study was to evaluate the prevalence of gingival pigmentation and to correlate the colour of the gingiva with facial skin complexion.

Materials and methods: Five hundred systemically healthy subjects of age group newborns to 55 years were included in this cross-sectional study. The subjects were divided into five groups with 100 in each group: Group I- <6 months, Group II- 6 months to 5 years, Group III- 5 to 15 years, Group IV- 15 to 35 years and Group V- 35 to 55 years. Subjects facial complexion was recorded at the malar region of the face using Fitzpatrick scale. Severity of the gingival pigmentation was recorded using Dummett- Gupta Oral Pigmentation index and the distribution of the pigmentation was recorded using de Krom Oral Pigmentation Chart.

Results: In all the groups 100% prevalence of gingival pigmentation was found. In all the groups mandible has shown significantly more gingival pigmentation than maxilla, anterior than posterior, labial than lingual. There was a statistically significant increase in the gingival pigmentation from group I to III and decrease from group III to IV and no difference was found between group IV and V. In all the groups significant correlation was found between gingival pigmentation and facial skin complexion. Broad zone of gingival pigmentation was most commonly seen.

Conclusion: This study supports the impression that there is an influence of advancing age on gingival pigmentation and a strong relationship exists between facial skin colour and gingival pigmentation.

Key words: Gingival pigmentation, Facial complexion, Fitzpatrick scale, Dummett-Gupta Oral Pigmentation index.