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Oral Health Status in Sickle Cell Anemia Subjects

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Abstract : Sickle cell disease is a vascular disorder characterized by chronic, ongoing organ damage that is punctuated by episodes of acutely painful vascular complications.1 It is the most common genetic blood disorder in the United States, with about 2000 infants being identified through routine blood screenings annually, and an estimated 104,000-138,000 affected individuals living in the United States. Approximately 0.3%-1.3% of African American are affected by Sickle Cell Diseases (SCD).3 The aim of this paper is to present oral health status of patients with SCD. A total of 200 subjects of both sexes in the age group 18- 40 years were included in this study. The subjects were examined and the following indices were recorded • Oral hygiene index – Simplified (OHI-S). • Probing depths (PD). • Clinical Attachment Levels (CAL). • Gingival Index - Loe and Sillness. • Turesky Gillmore Glickman Modification of the Quigley Hein Plaque Index. (1970) • DMFT index. • Sickle Cell Disease Severity Index. A total of 1478 patients were screened of which 200 subjects were found to be diagnosed with SCD by electrophoresis. The study thus, included 200 subjects (111 females & 89 males) diagnosed with Sickle Cell Disease in the age group of 18-40 years. The probing pocket depths (PPD) were measured in millimeters. 36% had PPD in the range of 2-4mm, 48% had PPD in the range of 4-6mm while 16% had PPD of more than 6mm. Similar results were obtained for the Clinical Attachment Levels (CAL). 29.5 % subjects had CAL 2-4mm, 44.5% had 4-6mm & 26% had CAL 6mm & above. We can thus conclude that although oral health is not a priority for patients with SCD, it is supported by increased plaque accumulation. Because of the chronic anemic state of the patients with SCD, they should be encouraged to pay strict attention to oral hygiene instructions and practice.

Keywords : chronic, genetic, oral, sickle cell disease, vascular
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