

## EFFECT OF PERIODONTAL TREATMENT ON RED BLOOD CELL PARAMETERS IN PATIENTS WITH CHRONIC PERIODONTITIS

KAPIL JAIN<sup>1</sup>, SWARGA JYOTI DAS<sup>2</sup>, SHIVANI DWIVEDI<sup>3</sup>, RAHUL JAIN<sup>4</sup>,  
BABITHA NUGALA<sup>5</sup> & MEGHA JAIN<sup>6</sup>

<sup>1,3,5</sup>Department of Periodontics, Peoples College of Dental Sciences & Research Centre, Bhopal, Madhya Pradesh, India

<sup>2</sup>Department of Periodontics, Regional Dental College, Guwahati, Assam, India

<sup>4</sup>Department of Medicine, Peoples College of Medical Sciences & Research Centre, Bhopal, Madhya Pradesh, India

<sup>6</sup>Private Practice, Madhya Pradesh, India

### ABSTRACT

#### OBJECTIVES

*Anemia of chronic diseases is a cytokine mediated anemia seen in various chronic infective inflammatory conditions. The present study was carried out to evaluate the effect of periodontal treatment on levels of red blood cell parameters related to anemia of chronic disease in patients with chronic periodontitis.*

#### METHODS

*A total number of 36 females with chronic periodontitis were included in the study. The Clinical parameters recorded at base line were periodontal pocket depth and Clinical attachment level followed by full mouth scaling and root planning. Red blood cell parameters recorded at baseline were hemoglobin concentration, red blood cell count, packed cell volume, mean corpuscular volume, mean corpuscular hemoglobin, mean corpuscular hemoglobin concentration and erythrocyte sedimentation rate. The clinical parameters and Red blood cell parameters were again recorded at nine months post treatment.*

#### RESULTS

*Post treatment there was a significant decrease in probing pocket depth, clinical attachment level and erythrocyte sedimentation rate. While, there was a significant increase in levels of red blood cells, hemoglobin concentration and packed cell volume. The mean corpuscular volume, mean corpuscular hemoglobin and mean corpuscular hemoglobin concentration were comparable at both point of time.*

#### CONCLUSIONS

*The study provides evidence that periodontal therapy in patients with chronic periodontitis may lead to an increase in levels of red blood cells, hemoglobin concentration and packed cell volume together with decrease in values of ESR.*

**KEYWORDS:** Anemia, Chronic Periodontitis, Hemoglobin, Red Blood Cell, Mean Corpuscular Volume

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