

## Comparison of Initial Periodontal Therapy Outcome in Smoking and Non-smoking Patients with Chronic Periodontitis

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Keywords: Chronic periodontitis, Initial therapy, Smoking

**OBJECTIVES:** Cigarette smoking is accepted as an important factor that increases the risk for initiation and progression of chronic periodontitis (CP). The aim of this study was to evaluate the success of initial periodontal therapy in smoking and non -smoking individuals with CP.

**MATERIALS AND METHODS:** A comparative study was carried out on a systematically selected sample of 43 patients, 22 smoking (51.2%, median age 40) and 21 non -smoking patients (48.8%, median age 43). Exclusion criteria for the study included: pregnancy, chronic use of antibiotics, significal illness or condition that could affect periodontal status. Subjects were interviewed about their smoking habits and clinical examination was performed by a qualified periodontist. We used periodontal pockets probing depth before and three months after the therapy, being the most important clinical index for prediction of further disease progression. Four probing measurements were recorded (buccal, lingual, mesial and distal) for each tooth. The initial therapy consisted of supragingival and subgingival phase.

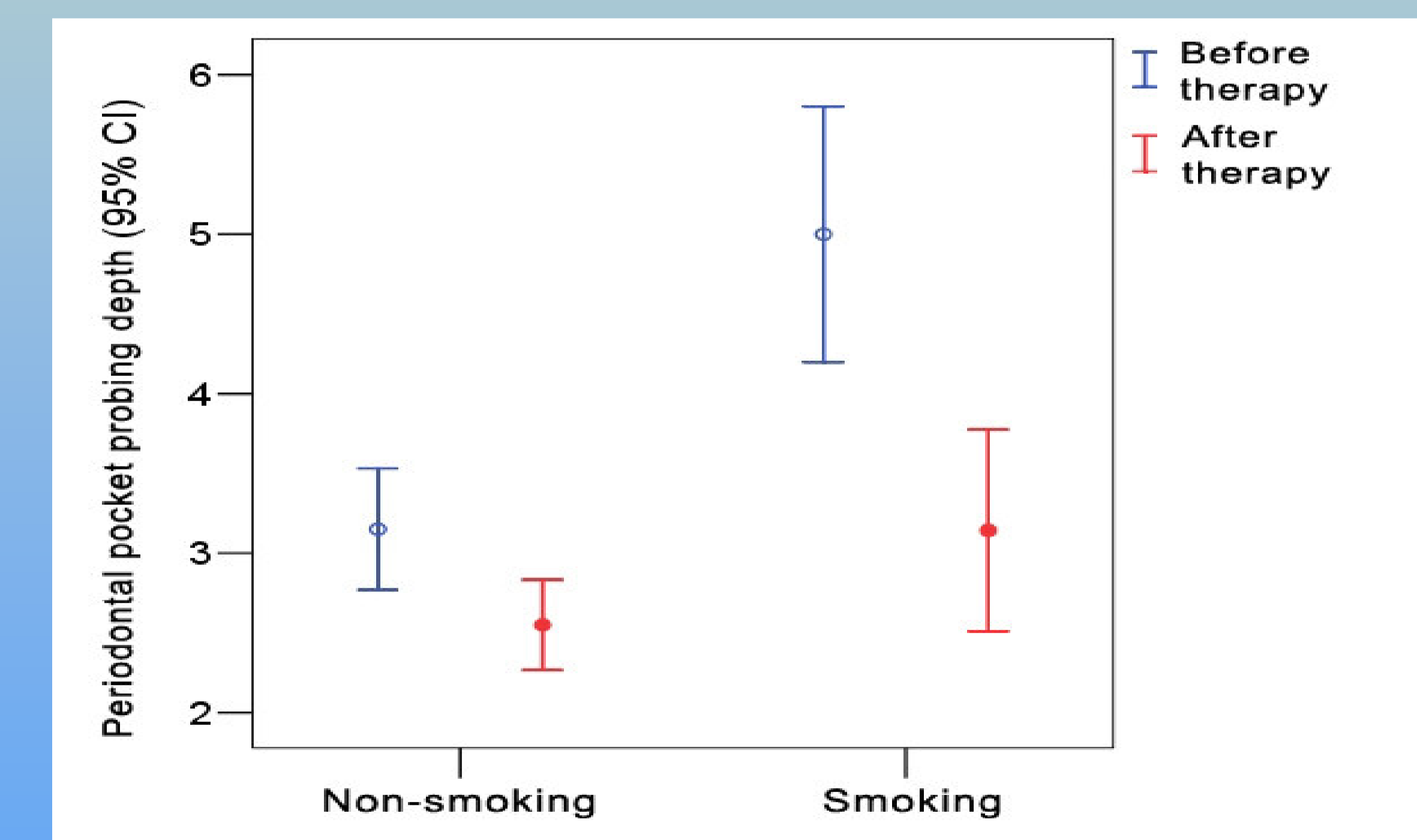
**RESULTS:** Effectiveness of the initial periodontal therapy was tested by comparing the probing depth values before and after the therapy. By analyzing the number of tooth surfaces that showed reduction of probing depth more than 1.5 mm, we found statistically significant reduction in group of smoking patients ( $\chi^2=6.62$ ,  $P=0.010$ ).



**NON – SMOKING PATIENT BEFORE INITIAL PERIODONTAL THERAPY**



**NON – SMOKING PATIENT AFTER INITIAL PERIODONTAL THERAPY**



**CONCLUSION:** Initial periodontal therapy was successful in smoking and non - smoking patients. The reduction of periodontal pocket depth was significantly higher in smoking patients that can be related to initial higher probing depths in this group of patients