



PERIODONTAL HEALTH – QUALITY OF LIFE

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Assessment of patient-reported data after systematic periodontal therapy – a retrospective consecutive study on periodontal health related Quality of Life –

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Background: There is limited data on patient's perception of their individual quality of life changes after periodontal treatment.
Aim: To evaluate patient's perception of success after systematic treatment of chronic periodontitis (CP) and during ongoing supportive periodontal therapy [SPT]. To achieve valuable information on individual well-being, social environment, oral health, performance, habits and esthetics, as measured by pain as well as by financial and time expenditure and their related factors.

Methods: 281 patients (w150/m131), mean age 55 years (range: 45-86 years) were interviewed consecutively. All of them showed high compliance* (C1 = 91.9% / C2 = 8.1%) to the recommended supportive periodontal therapy [SPT] for at least 1 and up to 16 years (observation period, average: 12.5 years). A questionnaire designed for laymen was used. Randomly selected patients answered 10 questions on a numerical scale from 0 to 10 followed by an anonymous evaluation of the questionnaires by descriptive statistics and significance testing. 280 patients agreed to be included into the study, 262 questionnaires were completed and included and statistically evaluated.

Inclusion criteria: treated chronic periodontitis (CP), treatment completed for more than 1 year before investigation, compliance over the period of SPT

Exclusion criteria: Patient failed to show compliance to SPT as described below.

Statistics: 2-sided t-test, evaluation of 95% confidence intervals, significance representation $p < 0.05$ / $p < 0.01$ / $p < 0.001$

* Compliance:

C1: patient showed up for SPT at any time over the observation period

C2: Patient under SPT missed at least one appointment in at least one year of systematic SPT; no lack of SPT appointment over more than one year during observation period

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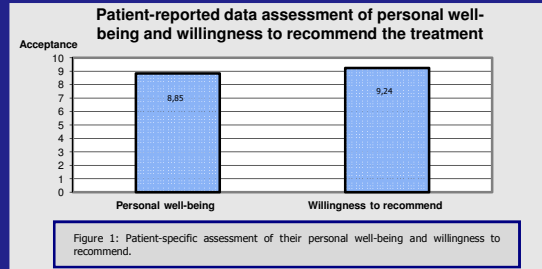


Figure 1: Patient-specific assessment of their personal well-being and willingness to recommend.

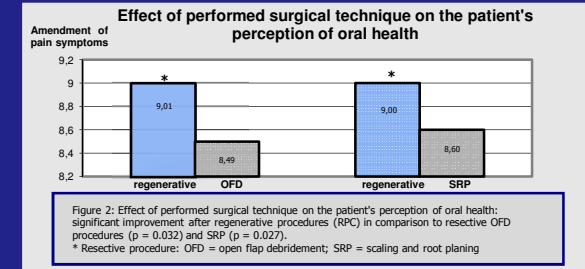


Figure 2: Effect of performed surgical technique on the patient's perception of oral health: significant improvement after regenerative procedures (RPC) in comparison to resective OFD procedures ($p = 0.032$) and SRP ($p = 0.027$). * Resective procedure: OFD = open flap debridement; SRP = scaling and root planing

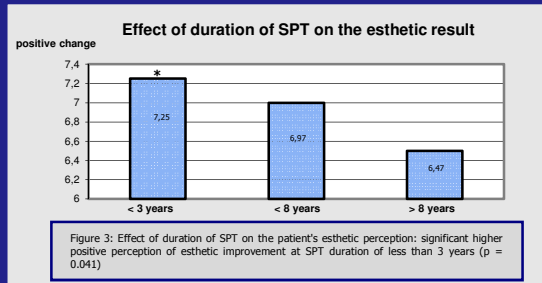


Figure 3: Effect of duration of SPT on the patient's esthetic perception: significant higher positive perception of esthetic improvement at SPT duration of less than 3 years ($p = 0.041$)

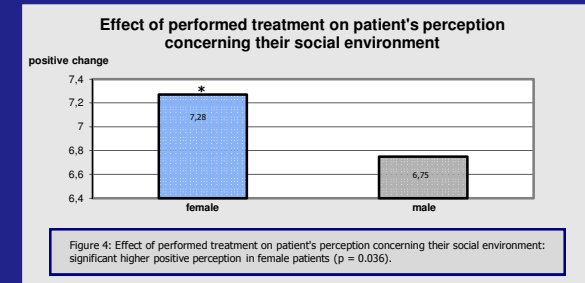


Figure 4: Effect of performed treatment on patient's perception concerning their social environment: significant higher positive perception in female patients ($p = 0.036$).

Results: The surveyed patients show a very high degree of **confidence in the periodontal treatment** (mean: 9.24 [Figure 1]) and feel **very satisfied** (mean: 8.85 [Figure 1]). Women notice a higher **positive impact on their social environment** than men ($p < 0.05$ [Figure 4]). Patients under SPT of <3 yrs. show higher positive perception of treatment success than patients under SPT >3 yrs. ($p < 0.01$). They also appreciate a higher impact on their **appearance** ($p < 0.01$ [Figure 3]).

The type of periodontal surgery performed determines the impact on the patient's perception of **oral health** noticed by bleeding gums, malodour and pain. **Regenerative periodontal surgery** will lead to **better remission of symptoms** compared to resective OFD procedure ($p < 0.05$ [Figure 2]) and SRP ($p < 0.05$ [Figure 2]). However, financial ($p < 0.001$) and time exposure ($p < 0.01$) in the context of regenerative procedures are perceived as a burden. Periodontal treatment in the hands of a specialized team led to a **significant reduction in the patient's complaints** ($p < 0,01$). No influence was found under different team conditions of SPT intervals.

