

ENERGY DISTRIBUTION FOR RADIOFREQUENCY SOFT PALATE REDUCTION IN SNORING

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While radiofrequency energy Rfe has been successfully used to cause volumetric soft tissue reduction and stiffening of soft palate and tongue, additional cumulative energy has been proposed to improve the cure rate for Sleep-disordered Breathing (SDB). We hypothesized that the distribution of Rfe over the soft palate may influence the cure rate. The aim of the present study was to evaluate the success rate of Rfe by application of more energy on each Para median site of the soft palate without changing the total amount of energy delivered for SDB and to evaluate two techniques:

SUB MUCOSAL AND MUSCULAR TECHNIQUES

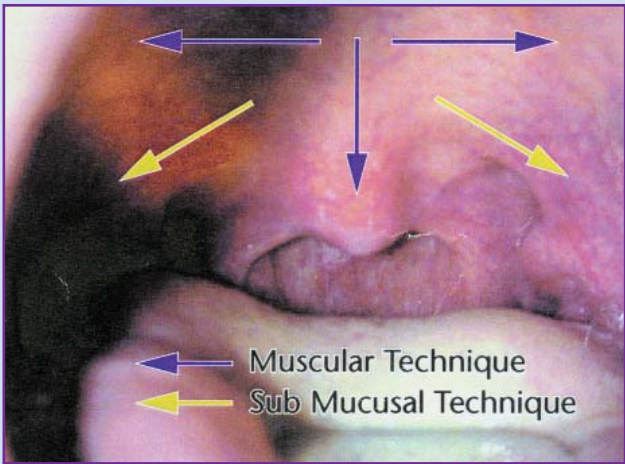
PATIENTS AND METHODS

Fifty-two patients treated for snoring by radio frequency were enrolled in this retrospective study. Patients were treated with the same total amount of energy per treatment session (1500J). But with deferent distribution of energy and different technique: Sub mucous and muscular techniques.

Patients in group 1 (n = 28) were first treated with 800J in the middle and 350J in each para median site (Somnus® Rfe generator) whereas those in group 2 (n = 24) were treated with 500J in the middle and each para median site (Ellman® Rfe generator).

Visual Analogy Scales (VAS) were used to assess the severity of snoring and pain after each treatment session.

TECHNIQUES



The patients of both groups were not significantly different in snoring, length and thickness of the soft plate.

RESULTS

The number of treatment sessions were statistically ($p<0.05$) bigger in group 1 (2.00 ± 0.38) when compared with group 2 (1.54 ± 0.51).

Better snoring grading reduction was observed in group 2 in comparison with group 1 after each treatment session. After one treatment session, the muscular application of 1500J with Ellman® generator (group 2) led to a significant decrease in snoring score in comparison with group 1.

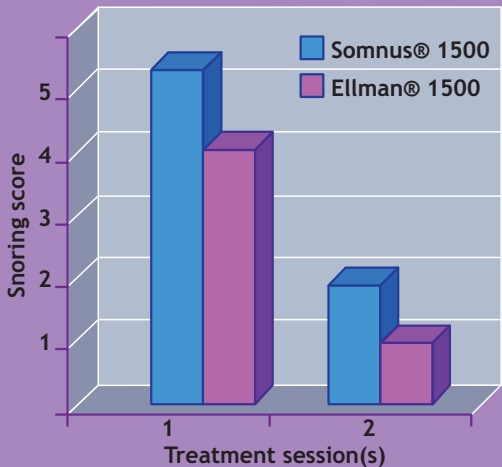
Mean pain score (VAS) and the incidence were not statistically different when comparing both groups, but it existed with sub mucosal technique more mucosal burns.

CONCLUSION

Our study suggests that the amount of Para median energy delivered in the peristaphyllin muscles might influence the cure rate of SDB. Stiffening of each lateral part of soft palate may play a role in snoring score. However the frequency of Rfe generator was 465 kHz in group 1 and 3800 kHz ingroup 2.

Further investigations comparing different para median energies with the same Rfe generator should be performed.

SNORING GRADING OVER TIME



CURE RATE

