



247 PSYCHOLOGICAL ASPECTS INFLUENCING PATIENTS' CHOICE FOR LOCAL ANESTHESIA IN NON-SURGICAL PERIODONTAL TREATMENT

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Objective

To determine psychological factors influencing patients' choice between Oraqix[®] anesthesia gel (AG) and injected Ultracain[®] D-S forte (LA) during non-surgical periodontal therapy (SRP). The hypothesis was that dental anxiety, injection fear or pain sensitivity (measured by periodontal probing pain) may be influencing factors. Additionally pain during SRP was assessed.

Methods

38 patients with periodontitis were included in a randomised, single-blind, split-mouth, cross-over clinical trial. Periodontal probing pain was recorded at baseline by 0 to 100 mm visual analogue scale (VAS) and 5 step verbal-rating-scale (VRS). Additionally MDAS (*Humphris 1995*) and IF (*Milgrom 1997*) were recorded at baseline. SRP was performed in two appointments; once with the use of AG, once with LA. Patients completed questionnaires as for the current and future preference of local anesthesia. Inter-group differences were estimated with a 95% confidence interval by Mann-Whitney-test.

Results

	CHOICE FOR ANESTHESIA GEL		CHOICE FOR INJECTION		p-VALUE
	MEAN (SD)	MIN - MAX	MEAN (SD)	MIN - MAX	Mann-Whitney
Modified dental anxiety scale (5.0 to 25.0 points)	10.1 (3.1)	5 - 14	12.1 (3.8)	7 - 20	0.096
Injection fear survey (4.0 to 20.0 points)	8.3 (2.6)	4.5 - 14.8	10.1 (3.8)	4.7 - 16.8	0.254
Probing pain	VAS	20.1 (21.8)	0 - 83	21.8 (24.0)	1.000
	VRS	0.7 (0.7)	0 - 3	0.8 (0.7)	0.573
SRP anesthesia gel	VAS	18.2 (16.2)	1 - 50	55.7 (27.6)	0.000
	VRS	0.8 (0.5)	0 - 2	2.1 (1.1)	0.000
SRP injected anesthesia	VAS	9.7 (13.1)	0 - 50	25.2 (29.8)	0.186
	VRS	0.4 (0.6)	0 - 2	0.8 (1.1)	0.229

22 patients (58%) preferred gel, 14 patients (36%) preferred injection. One patient was indecisive, one patient missed the recall appointment. MDAS and IF (p=0.096, p=0.254, Mann-Whitney) had no influence on anesthesia choice. Pain perception in AG treatment correlated with choice for injection (VAS p=0.000, VRS p=0.000, Mann-Whitney).

Conclusion

In contrast to our hypothesis neither dental anxiety nor injection fear or pain sensitivity showed an influence on anesthesia choice for non-surgical periodontal treatment. Assessed pain during treatment was found as only predictor for patients' preference for future local anesthesia use.