THE EFFECT OF TWO DESENSITIZING AGENTS ON DENTINE HYPERSENSITIVITY: A RANDOMIZED, SPLIT-MOUTH CLINICAL TRIAL

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INTRODUCTION

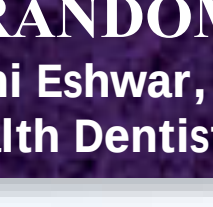
Desensitizers – Gluma, Hemaseal, Pulpdent, Nivodense

Acute toxicity in oral cavity.

Skin corrosion, Serious eye damage.

Chitosan hydrogel (CH)

Biocompatibility,
Hydrophilicity,
Bio adhesive,
Biodegradability,
Antibacterial



AIM

To compare the efficacy of glutaraldehyde-containing Gluma desensitizer and Chitosan hydrogel on reducing the dentine hypersensitivity.

MATERIALS AND METHODS

Convenience sampling - 30 participants

- Randomized spilt mouth – 3rd & 4th quadrant

Baseline
Immediately after intervention
After 15 days

- VAS recorded

RESULTS

CHITOSAN	Mean	SD	N
Baseline VAS Scale	6.53	1.137	30
After intervention 36	4.33	1.124	30
After 15 days 36	5.67	1.373	30

GLUMA	Mean	SD	N
Baseline VAS scale	6.53	1.137	30
After intervention 46	3.80	.997	30
After 15 days 46	3.60	.770	30

(I) time CH application	(J) time	Mean Difference (I-J)	Std. Error	Sig.[b]	95% CI[b]	
					Lower Bound	Upper Bound
1 - baseline, after	2	2.200*	.194	.000	1.707	2.693
	3	.867*	.229	.002	.286	1.448
2 - after intervention	1	-2.200*	.194	.000	-2.693	-1.707
	3	-1.333*	.281	.000	-2.047	-.619
3 - after 15 days	1	-.867*	.229	.002	-1.448	-.286
	2	1.333*	.281	.001*	.619	2.047

b. Adjustment for multiple comparisons: Bonferroni.,

DISCUSSION

Chitosan is a new biomaterial for dental applications with potential bone regeneration[1] & bio-adhesive properties[2] that can be used in reducing hypersensitivity.

Recommendation: Chitosan with varied concentrations to be tested for the reduction of sensitivity

CONCLUSION

Gluma and Chitosan Hydrogel both are potential desensitizers.

PUBLIC HEALTH SIGNIFICANCE

As the prevalence of DH is 70-80% and can be seen from middle age to older adults, addressing this need with materials that have the least adverse effect on exposure is required.

REFERENCES

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