

DEPARTMENT OF SURGERY
THE RAYNE INSTITUTE
123 COLD HARBOUR LANE
LONDON SE5 9NU

Professor M. BAUM, CHM, FRCS, Director
Professor A. BENNETT, PhD, DSc, Pharmacology
Professor V. V. KAKKAR, FRCS, Thrombosis Unit
Mr. J.A. RENNIE, MS, FRCS, DTM & H Senior Lecturer

Telephone: 071 326 3018
Fax: 071 326 3123

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Dear Saul,

Here is the statistical analysis of the data on the new device.

The results show an 84% success rate if all restorative procedures are considered, and a 97.2% success rate with restorative procedures confined to the anterior teeth. The same investigator (R Hochman) reported a study on 600 cases involving the predecessor device, and found a success rate of 76.5% (362/473 restorative procedures; Hochman, 1988). There is no significant difference in efficacy when the results of the two studies are compared statistically ($p > 0.05$, Fisher's exact test).

Using the same device as in the Hochman publication, but in a placebo-controlled study, Clark et al (1987) obtained an 80% success rate (24/30) with restorative procedures in the test group, but only 25% (5/20) in the controls. There is no significant difference in any of the the success rates above (all $p > 0.05$, Fisher's exact test), and compared to the placebo data in the Clark study the new device shows a highly significant benefit (42/50 vs 5/20, $p < 0.001$, Fisher's exact test).

References

Clark MS, LM Silverstone, J Lindenmuth, MJ Hicks, RE Averbach, DL Kleier and NH Stoller (1987). An evaluation of the clinical analgesia/anesthesia efficacy on acute pain using the high frequency neuromodulator in various dental settings. Oral Surg. Oral Med. Oral Pathol. 63: 501-505.

Hochman R (1988). Neurotransmitter modulator (TENS) for control of dental operative pain. J Amer Dental Assoc 116: 208-212.

Alan

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