

THE UNIVERSITY OF IOWA

August 5, 1996

Mr. Robert A. Bevilacqua, President
Health-Dent International
122A Kirkland Circle
Oswego, IL 60543

FAX: 630-851-8899

Dear Mr. Bevilacqua:

We completed the Health-Dent Desensitizer with benzalkonium chloride (H-D DS) study this past week. I'm sorry that it took us slightly longer than we expected. We had some problems with our initial run of samples, and decided to use the All-Bond 2 cementation system rather than the Nexus system in our second run.

Here are the results:

<u>Group#</u>	<u>Treatment</u>	<u>Mean</u>	<u>St. Dev.</u>	<u>Stat. Group</u>
1	Gluma/Water	7.4	6.0	A
5	Water/Water (Control)	7.8	5.8	A
3	H-D DS/Water	8.2	4.3	A
7	Water/H-D DS	10.8	6.2	A
2	Gluma/Gluma	13.5	6.0	A B
4	H-D DS/H-D DS	13.8	7.1	B
6	Water/Gluma	19.9	8.8	B

As you can see, the bond strength of the control (Group 5, water/water) was not significantly different than that of the sample as treated with H-D- DS (Group 3) or with Gluma (Group 1) at the "preparation" appointment. This demonstrates the same outcome that we had with our earlier (Gluma) study, that treatment with H-D DS (or Gluma) at the preparation appointment does not affect the bond strength.

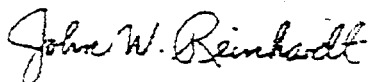
Of the groups which were *not* desensitized at the preparation appointment, only the one treated with Gluma (Group 6) at the seating appointment had a significantly higher bond strength. This is of academic interest to us, and will guide us into another study, but probably is not as interesting to you. In fact that group (6) was not significantly stronger than that treated with Gluma at both appointments (Group 2) or that treated with H-D DS at both appointments (Group 4).

With regard to the additional samples (direct composite resin) which had H-D DS substituted for Primer A & B (All-Bond 2), half the samples with the H-D DS broke off as the split metal mold was removed, making them non-testable.

We intend to submit an abstract of this study to the AADR with hopes of having it accepted for presentation at the meeting in Orlando in March, 1997. We will follow that with submission to a refereed journal for consideration for publication,

I hope you find our study satisfactory to answer the questions you initially posed about H-D DS. I think the fact that it can be used without affecting the final bond strength makes prep desensitization a logical step which many clinicians will choose to use. Please feel welcome to contact me if you have any questions about our study or the results. Thank you again for your support of our research.

Sincerely,

A handwritten signature in cursive script that reads "John W. Reinhardt".

John W. Reinhardt, DDS, MS, MPH
Professor and Head