

Crowns in 90 minutes latest in high-tech dentistry

By **MARCIA GREEN**
Valley Breeze Editor

CUMBERLAND - If you've ever had a dental crown installed on a decayed tooth, you may still be wincing at the memory of the sticky impression, the temporary piece that fell off, and the return visit required to finally get the new crown restoration installed.

Cumberland dentist Dr. Neal Rogol is now offering new crowns in a single, 90-minute visit using an instrument called CEREC by the Serona Company.

Dr. John DeMello of Lincoln is also certified in this procedure that was developed in the 1980s in Switzerland and now offered nationwide.

The company estimates 7 million of these procedures have been completed worldwide.

"I've never been so excited about dentistry," said Rogol.



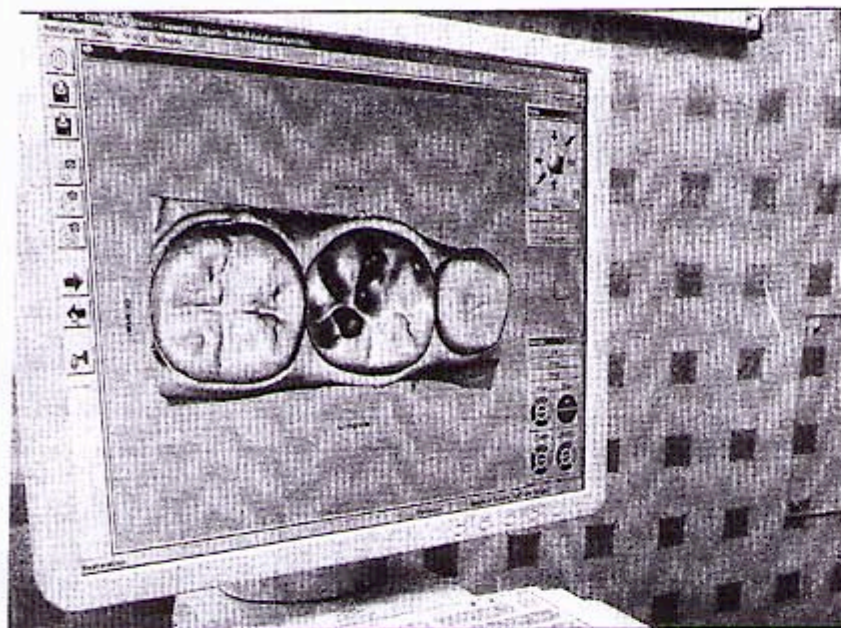
John DeMello, DDS

"It's so exciting now."

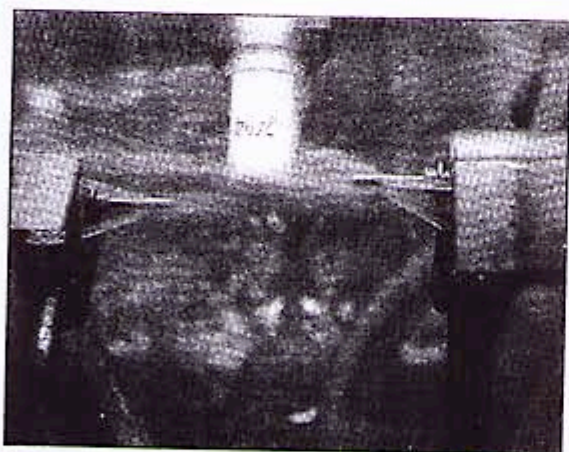
Rogol describes himself as a "drilling and filling" dentist for the past 20 years.

Now he uses a computer camera to capture an image of the tooth, design the crown and then actually mill the new tooth topping in his office before installing it during the same visit.

Rogol said drilling is held to a minimum, and most of the time



Valley Breeze photo by Bruce McCabe



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At top, computer-driven cutters shape a block of zirconium porcelain into a tooth crown. Above, a tooth with silver filling before, and at right, after installation of the new crown.

in the office is devoted to the design and creation of the new crown.

Patients arriving for a new crown will first have old fillings and decay removed and the tooth shaped to accept the new crown.

Then an optical 3D image is made using a small camera placed inside the mouth.

A computer screen next to the dentist chair shows the tooth from all sides and the shape of the new crown.

Using computed aided design technology, the dentist crafts the crown needed for the particular tooth.

Once the design is completed, the cap is crafted in 18 minutes onsite from a block of substance, zirconium porcelain, that is matched to tooth color.

Rogol says it's similar to the hard surfaces such as Corian that are used for countertops.

The new restoration is then bonded, polished and the patient is finished.

Rogol can't say enough about the procedure.

In addition to saving time, the procedure also allows the dentist to save more of the good tooth structure.

He says the final bond is stronger, too.

"It's actually miraculous," he said.

Rogol says the cost is competitive with the traditional method, running \$500 to \$900 depending on the number of surfaces.

Those with crown coverage on their insurance policy will pay no more for this procedure than the standard work.

Rogol, a Scituate, Mass., native and 1982 graduate of Tufts University, has been practicing on Diamond Hill Road in Cumberland since 1983.

He's had the CEREC system for the past year.

DeMello, a graduate of Georgetown University, is on Smithfield Avenue in Lincoln. He was certified several months ago.

Correction

In *The Valley Breeze* of March 9, 2005 it was misstated that Dr. John DeMello was "recently certified" in the fabrication of one appointment crowns.

There is no certification for this procedure in dentistry. DeMello was recently named "Dental Office of the Month" on Cereconline.com, the Web site for the Cerec company that produces the technology. DeMello's office was recognized for pioneering this technology in Rhode Island as well as for tutoring dentist that are new Cerec users at no compensation by the company or new user dentists.