

# CuttingEdge

## Therapy for Caries

(that does not involve cutting any teeth)

By Dr. Steve Parrett

### INTRODUCTION

I hope this article will give you some pause for thought... about our true mission as dentists, and what most patients have expected for almost 200 years.

I will be describing a case of a 37-year-old woman who came new to my practice and how our treatment has progressed over the last two-plus years. My focus in this presentation will be about an innovative way to treat dental caries, non-surgically. I will discuss how my thinking about this treatment evolved over the two years of her experience and conclude with where the protocol stands today. The idea of using Silver Diamine Fluoride to arrest and reverse decay may require some changes in your philosophy of treating dental disease to adopt a similar protocol.

I hope to inspire you to focus on treating the causes of dental disease (caries AND periodontitis), and not just the destruction caused by diseases.

The current dental literature is packed full of well-written, scientifically sound articles related to this topic of bacterial treatment and control. I have stacks of them. It will be worth your efforts to Google these topics and present a new "Gold Standard" treatment to your patient, one that involves silver! Allow me to offer a few topics to start you on your journey of discovery:

- International Caries Consensus Collaboration 2015 in Belgium
- G.V. Black 1905 trip to Colorado and how long-ago Silver Nitrate was used for treating decay
- Who actually discovered the "Colorado black stain" on teeth was due to fluoride (I will give you a hint on this one; it was a chemist at the Alcoa plant in Pittsburgh in 1950. GO PA!)
- CAMBRA, motivational interviewing, KOBRA (it may not pop up until this article comes out; it is my patient-friendly interviewing/assessing tool included in this article)

- Laser fluorescence and decay detection/monitoring using Diagnodent
- Silver Diamine Fluoride, SDF, remineralization
- December 1937 *The Dental Cosmos/JADA* article by Dr. James Prime, "Controlling Dental Caries"
- Go to [www.ElevateOralCare.com](http://www.ElevateOralCare.com) and ask for the "Scientific Literature Review" packet or file
- Proactive Intervention Dentistry
- Microbiologically Monitored and Modulated Periodontal Therapy, just to expand on the bacterial focus of dental disease treatment

The above will keep you busy for a while and open your mind wide!

Once you have digested the basics of this approach and accept the premise and proof, you will probably find you spend a lot more time talking to your patient and addressing a pressing need for many of them. I highly recommend bringing your whole office staff on board with the approach you develop. Every one of them can take part in the educational process your patients will need. Both patients and staff will benefit.

I am not suggesting that we ignore some of the other innovative products and treatments that have come into existence, such as halitosis and sleep apnea treatments, cosmetic dentistry, implants, tooth whitening, and others...the list is longer. But treat dental disease first and best.

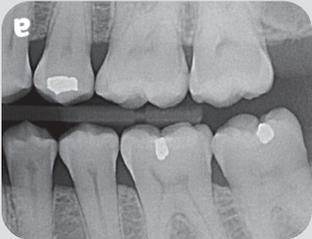
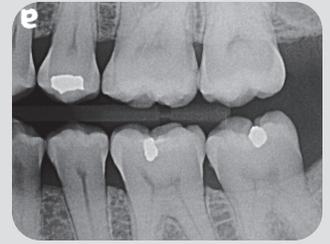
As we get into the details of this case, I have attached supporting photos, X-rays and forms that are part of what we consider our protocol when using SDF on our remineralization patients. I think your learning will accelerate if you get coached. Feel free to forward questions to me. I will leave contact information at the end of this article.

Back to my opening statement, what people have expected for 200 years. Who does not come back from a dentist visit and get asked the question "did you have any cavities?" First thing! And there is the classic new fluoride toothpaste commercial from the 50s or 60s where the youngster exclaims, "LOOK MOM NO CAVITIES!"

## TIMELINE FOR PATIENT MS

**9-25-18 Initial visit** - patient stated it has been five years since a dental checkup, was living in England. BWX and Panoramic x-ray were taken. "Watch" was placed on #12,13,14,19,20.

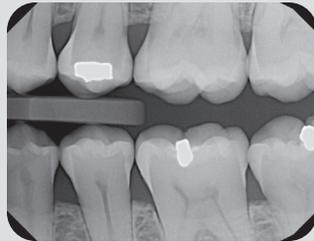
We recommended fluoride varnish be applied and gave patient 5000 ppm toothpaste to use twice daily. Highest Diagnodent reading was #15 O -52. Gave patient our KOBRA (Kick Out Bad Bacteria Resist Acid Attack) educational/motivational handout and discussed possible SDF use in the future.



**4-22-19 Six-month recall** - patient stated she has been using 5000 ppm daily at home. We noted stable or slightly improved interproximal decal areas on BWX taken today and recommended we apply SDF in posterior today with fluoride varnish over it, and patient approved. We reviewed KOBRA with her. Diagnodent on #15 -35, lower than first visit.

**10-28-19 Six-month recall** - BWX taken and compared to previous BWX. No progression of any demineralization and some apparent re-min is occurring.

SDF was applied to left posterior interproximal areas with fluoride varnish applied over and full mouth within 10 seconds. Recommended 2 more consecutive applications before next recall. Dispensed 5000ppm toothpaste and reappointed patient for a follow-up application of SDF in 1 month.



**12-2-19 One-month follow-up for another (2nd) SDF application** - we used Superfloss (PHOTOS ATTACHED FOR TECHNIQUE) to apply to all left posterior interproximal areas for two minutes, then covered with fluoride varnish. Reappointed for 1-month follow-up.

**12-30-19 Follow-up for 3rd consecutive application of SDF** - SDF applied with Superfloss again to left posterior interproximal and covered with fluoride varnish. 1 left BWX was taken to update progression or regression of de-min. Appearance of improvement with less shadows at contacts again this time. (Separate BWX photo attached for this additional follow-up from the series of 3 within 2 years.)



**8-18-20 COVID-19 recall appointment** - Due to the pandemic outbreak and unavailable PPE, we were forced to cancel three months of our hygiene department recall appointments. Thus, there is a 9-month span between visits for patient MS. BWX revealed an increase in remineralization interproximal of left posterior teeth. I have included a Right BWX in our series to show that we may be getting an associated effect with the SDF/fluoride varnish treatments as some researchers report. Patient MS was seen 11-30-20 just for BWX and SDF/fluoride varnish application. We made a diagnosis to continue our course of treatment.