

Chairside whitening with the Zoom Advanced Power system

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In our “I want it yesterday” society, patients are requesting faster results, which has also extended to chairside whitening. This has been a challenge due to time consuming and inadequate isolation methods, as well as weak chairside bleaching lights. When combined with the bleaching gels that were available, these chairside bleaching units were ineffective in use and generally were not comfortable for the patients during the sixty minutes the process required at each appointment.

A “Whiter” Paradigm

Discus Dental has recently introduced an improved chairside bleaching system. The Zoom Advanced Power Lamp which, when combined with their Zoom 25% Hydrogen Peroxide In-Office bleaching gel, provides easier Chairside whitening for patients who want immediate results . The system features the Zoom Advanced Power Lamp along with a completely redesigned Zoom Chairside Whitening Kit and 25% Hydrogen Peroxide bleaching gel. The Zoom gel has been specially formulated to work in combination with the Zoom lamp technology. The gel is dispensed from a patented, dual-barrel syringe that automixes a 32% Hydrogen Peroxide gel with a high pH booster gel, producing a 25% Hydrogen Peroxide gel.

To light or not to light?

Light activation of bleaching gels has long been debated within dentistry. Previous studies with other chairside whitening units have demonstrated minimal if any noticeable differences in whitening when comparing teeth treated with the same bleaching gel with and without application of a chairside light.

One drawback to Chairside whitening has been redarkening over the week post treatment. However, recent clinical studies prove the Zoom lamp and Zoom gel work better than the Zoom gel alone. Y. Li et al, at Loma Linda University have conducted clinical research which shows that immediately following treatment, teeth whitening with the entire Zoom System (lamp and gel) are 48% whiter than teeth whitened with the gel alone. Furthermore, this conclusion was also supported by Ontiveros et al, at the University of Texas Dental Branch Houston, stating that even one week after treatment, teeth whitened with the Zoom System remain 35% whiter than those whitened with the gel alone.

Another drawback to Chairside whitening involves sensitivity following the procedure as the teeth rehydrate. We know that some patients will demonstrate increased sensitivity following chairside whitening, especially those who had sensitivity prior to the procedure or have root exposure and enamel wear. The Zoom System addresses this concern, utilizing a sensitivity protocol to maximize patient comfort. This includes the application of Relief® ACP Oral Care Gel which acts as a desensitizing agent to be applied in either trays or with a toothbrush.

Clinical Tips for Successful Chairside Whitening:

1. Isolation is critical as the bleaching solutions designed for chairside whitening are stronger and can cause soft tissue damage should the contact the gingiva or lips. Lip and tongue retractors such as Discus Dental's IsoPrep™ Retractor and Liquidam® light curable dam, can completely isolate the soft tissue from contact with the bleaching gel and exposure to

the chairside whitening lights. Use of a hydrogen peroxide bleaching gel is more effective than carbamide gel for chairside whitening but these materials are more caustic to soft tissue so proper isolation is required.

2. The gel should be applied in 1-2mm thick layer over all tooth surfaces that will be whitened to ensure that adequate bleaching gel is present to cause tooth whitening during application of the whitening light.
3. To avoid spreading the bleaching gel onto the soft tissue or under the isolation, remove the gel from the teeth using a surgical suction tip (now included in the new redesigned Zoom kit) after each 15 minute session. Avoid using a water or air spray from the air/water syringe as this can dislodge the isolation and push bleaching gel onto the soft tissue. Any remaining gel may be removed with a moist piece of gauze.
4. Tooth sensitivity can be addressed by having the patient use a desensitizing agent. The Zoom System provides a unique Patient Post Care & Maintenance Kit that includes a syringe Relief ACP. Relief ACP (Discus Dental) can be administered in either a take home tray or applied with a toothbrush daily for 10-30 minutes.
5. Application of vitamin E oil to the lips prior to the initiation of the chairside whitening will minimize any irritation from the process of retraction or bleaching.
6. Patients should also be advised that consuming coffee, tea, red wine or smoking during the two hours following chairside whitening can lead to staining and darkening of the teeth, until a pellicle reforms on the enamel surface.
7. To maintain and further enhance the chairside whitening results, it is advisable to fabricate take home trays to be worn for 30 minutes weekly. The Zoom System provides whitening maintenance with either NiteWhite® ACP or DayWhite® ACP take-home whitening gels, also conveniently found in the Patient Post Care & Maintenance kit.

Author information:

Dr. Bassett practices cosmetic and restorative dentistry in Scottsdale, Arizona. She is one of 200 dentists worldwide to be awarded accreditation with the American Academy of Cosmetic Dentistry. She has Fellowship in the AGD and is past president of the Arizona AGD, a recipient of the volunteer dentist of the year for Arizona CASS, a member of the editorial board of several peer reviewed publications and a published author. She was elected into membership in the American Academy of Fixed Prosthodontics in 2005. Dr. Bassett teaches the Esthetic Continuum at the Arizona School of Dentistry and is the founder of Women Teaching Women Cosmetic Learning Facility. She can be reached at DrMouthy@aol.com.

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