

Pre-Whitening Considerations: Maximizing Results

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As the demand for tooth-whitening and smile-enhancement procedures continues to increase, strategies to maximize results should be considered. Once a patient has qualified as a whitening candidate, key clinical intervention and education will ensure optimal results. These include a comprehensive dental hygiene experience (DHE), use of desensitizing agents prior to whitening procedures, appropriate scheduling for shade matching of restorative materials, and education on methods to maintain whitening results.

The registered dental hygienist is in a key position within the practice to facilitate and oversee pre-whitening considerations, beginning with a complete DHE to remove extrinsic stain, calculus, and plaque to ensure that whitening agents have access to enamel surfaces. Patients will experience enhanced shade change when surface accretions are completely removed in addition to receiving therapy essential for optimal periodontal health. During the DHE, a full review of whitening options should take place. In addition, shade analysis, along with impressions for custom trays and pre-treatment photographs, should be made.

Prior to the commencement of whitening treatments, minimizing hypersensitivity should be considered. Use of professional-strength fluorides or other agents such as potassium nitrate prior to whitening treatments has been proven effective in

reducing and/or eliminating sensitivity. At the conclusion of the DHE, clinicians should recommend an agent best suited for patients based on other conditions such as caries risk, plaque accumulation, and oral hygiene.

TREATMENT PROTOCOL

- Comprehensive dental hygiene experience
 - Evaluation/treatment for optimal periodontal/oral health
 - Removal of extrinsic stain, plaque and calculus
 - Pre-whitening photographs, shade determination, and impressions for whitening trays
- Dispensing/prescribing pre-whitening desensitizing medicaments
 - 5,000 ppm sodium fluoride
 - Potassium nitrate
 - Combination of the above
- Appropriate scheduling for shade matching of restorative/aesthetic materials
 - Wait 10 to 14 days following whitening treatment to ensure color match and adequate bond strength
- Education on maintenance of whitening results
 - Use of automated oral hygiene devices and over-the-counter products deemed safe and effective
 - Avoidance of staining related habits
 - Daily use of appropriate devices to clean tongue
 - Scheduling of future preventive appointments to determine the need for touch-up treatments

Regardless of the whitening treatment chosen, a minimum of 10 to 14 days between final exposure to whitening agents and final shade matching should be adhered to. This will ensure accurate shade matching and bonding of restorative materials to newly whitened surfaces. Oral hygiene should also be assessed at this time, and the hygienist should reinforce methods of proper maintenance of whitening results.

A recent survey of registered dental hygienists confirmed that patients undergoing aesthetic procedures have improved overall oral health.¹ As such, considerations for maintenance of a newly enhanced smile must be included for long-term results and patient satisfaction. Patients should be educated on avoiding habits that can result in staining and to use automated technology for thorough plaque control and stain prevention. Advice should also be offered regarding other products that may assist with maintaining results, such as whitening toothpastes that minimize stain accumulation, or any new plaque/stain control procedures, such as daily tongue deplaquing, which removes chromogenic material from the oral cavity. Finally, patients should be scheduled for a regular DHE to evaluate the need for touch-up and to enhance long-term aesthetic results and health.

Maximizing whitening results is easily and appropriately addressed in the dental hygiene department. The role of the registered dental hygienist is multifaceted and essential to whitening success. Pre-whitening considerations maximize clinical success and optimal oral health. □

Reference

1. Discus Dental, Survey of Dental Professionals, 2003.

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The Dental Hygiene Experience in Pre-Whitening Considerations



STEP 1. Illustration depicting "before" complete dental hygiene experience (DHE). Note presence of plaque, calculus, gingival inflammation and extrinsic stain.



STEP 2. Illustration depicting "after" complete DHE. Soft and hard deposits and extrinsic stain are removed. Tooth whitening results can now be maximized.



STEP 3. Illustration depicting completion of aesthetic enhancements, which included tooth whitening followed in 10-14 days by shade matching and bonding of restorative materials.