

The Immediate Smile Makeover

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Many patients, and potential patients, are unhappy with the appearance of their smiles. Some have the financial ability and the enthusiasm to improve their smiles through orthodontics, veneers, and crowns; far more cannot afford the expensive longer-term treatment that is necessary. Or at least, cannot justify the time and money simply because they cannot imagine how much their looks will be improved. Most patients are interested in relatively instant gratification, where their appearance can be improved in days or weeks, rather than in months or years.

While model and intraoral mock-ups have long been a part of comprehensive dentistry, the process can be expensive and very technique sensitive. The patient is unable to wear the mock-ups, often made from wax, outside of the dental practice. Thus, they can never get any input regarding their potential appearance from their friends and relatives.

For the many patients who have always wanted a new smile but thought that it was beyond their budget, a Snap On Smile (Fig. 1) could be the answer. DenMat (Santa Maria, CA) has refocused the Snap On Smile to a Multi Purpose Restorative Appliance that expands the appliance's indications, improves its esthetics, and simplifies the in-office process. The Snap On Smile is a comfortable, removable dental appliance that requires no preparation of existing tooth structures, no injec-

tions, and no cements or adhesives.

The innovative acetyl resin, more durable and stain-resistant than acrylic, is very strong, yet flexible and functional. It is expected to last several years with proper care and maintenance. It can be fabricated as thin as 0.5mm without compromising its strength and esthetics. This non-toxic material is also used in heart valve replacements as well as other applications in dentistry. The Snap On Smile is completely tooth-borne, and is designed to fit over the teeth and to adapt rather tightly such that the patient can eat and speak without the appliance disengaging or shifting position. The appliance does not impinge on the gingiva and does not cover the palate. It is very strong and polishes to an esthetic luster. In the longer term, Snap On Smile is durable, resists stains from cigarettes, wine and coffee, and other discoloring foods. Patients can eat and drink confidently and comfortably while wearing the appliance. The Snap On Smile is a completely reversible, totally non-invasive treatment procedure. It can be easily removed by the patient. The Snap On Smile should be targeted to patients seeking a non-invasive, reversible, affordable approach to permanent restorative and cosmetic dentistry who want to quickly feel, look, and function better.

INDICATIONS FOR THE SNAP ON SMILE

- A new smile in a hurry: wedding photographs, class reunion, or other imminent event.
- As a transitional, removable

new smile before the patient commits to a permanent, bonded smile with LUMINEERS or another type of porcelain veneer.

- An economical option when one or more missing teeth compromise the patient's smile, allowing the patient immediate esthetic relief as the patient saves the funds for permanent restorations.
- An interim (and beautiful) smile in between implant placement and implant restoration.
- A functional appliance for patients with parafunctional habits.
- For treatment facilitation whereby patients can see their new smiles, thereby encouraging comprehensive treatment.

THE SNAP ON SMILE PROCEDURE

The clinical protocol is rather straightforward. The first step is to determine whether the patient is a suitable candidate, and if they can understand both the advantages and the limitations of this treatment approach. Next, the shade and shape of the anterior teeth are analyzed and recorded. There is no preparation of the teeth or tooth reduction of any kind!

Polyvinyl impressions of the maxillary and the mandibular dentitions that clearly duplicate the entire occlusal, buccal, and lingual surfaces are taken. It is important that the embrasures and heights of contour are both cleanly and clearly visible since these are the anatomical areas that will be utilized for retention. A polyvinyl bite registration is also mandatory. The marginal areas, where hard and soft tissues meet, must



FIGURE 1—Snap On Smile, DenMat, Santa Maria, CA.



FIGURE 2—Pre-treatment smile.



FIGURE 3—Pre-treatment occlusion.



FIGURE 4. Initial radiographs.

be free of bubbles, folds and any other impression errors.

Then, a simple but exacting prescription form is filled out to design the patient's new smile. It is at this stage that both the dentist and the patient should contribute their input to the Snap On Smile design. Changes in tooth length (both incisally and gingivally), tooth width, contour and arch position can be incorporated. Missing teeth are designed to match the existing dentition as closely as possible.

The impressions are then sent to DenMat Laboratories in California where technicians create the new smile as dictated by the dentist's prescription within the real-life parameters indicated on the poured stone models. The Snap On appliance is tested at the lab and its fit, insertability, and esthetics are verified before the case is returned to the dentist.

Typical patient delivery appointments require minimal adjustments. Sometimes the appliance is slightly tight on the dentition, and the retentive areas must be very slightly reduced. Patients are asked to return after several days to re-evaluate the tightness (which seems to increase slightly after delivery). The patient is instructed to properly insert and remove the appliance, and to perform the minimal routine maintenance that is necessary.

Patients can wear these appliances as long as they are comfortable. They can eat with the Snap On Smile appliance, but it is recommended that after eating, the appliance be removed the teeth and the Snap On Smile cleaned, and the appliance returned onto the teeth. It is also recommended that the Snap On Smile be left out of the mouth at night.

The patient's new smile is often

vastly improved; many patients react in a very emotional fashion to seeing themselves in an entirely new light.

CASE STUDY

The patient was a 50-year-old woman whose chief complaint was that she was embarrassed by her smile. She had many teeth removed as a child, and then bridges were placed approximately 25 years ago overseas (Fig. 2). The bridges began to fail eight years ago and she had been re-cementing them in herself since that time. This caused her to stop smiling several years ago. The patient had not been to see the dentist for more than a year and felt overwhelmed by her dental situation. As an added complication, the patient was a smoker. Another practitioner had suggested multiple extractions and partial dentures. The patient was not comfortable with this proposed treatment plan and was actively exploring alternatives.



FIGURE 5—Composite resin applied to determine tooth length incisally.



FIGURE 6—Resin placed on lingual cingulum of centrals to obtain open vertical bite.



FIGURE 7—Existing bridge abutments “re-cored” to provide appropriate contours for Snap-On Smile retention.



FIGURE 8—Snap-On Smile as returned from DenMat lab.

The patient underwent a comprehensive examination and records were obtained. It was determined that the patient had an unstable and collapsed occlusion (Fig. 3). There were extrusions in the posterior segments and severe anterior wear had occurred.

The bridges on the upper right cuspid to second bicuspid, upper left lateral to second bicuspid, lower left first bicuspid to first molar, lower right cuspid to third molar were failing. Poorly adapted and non-contoured restorations were present on the most of the remaining natural teeth. The periodontal exam revealed minimal pocket depths throughout. Stain and calculus were generally present throughout. Radiographs revealed minimal caries activity

and adequate alveolar bone support (Fig. 4).

The periodontal risk of the patient was low, based on the excellent bone support available despite her limited oral hygiene and failing restorations. It was determined that the patient would be a candidate for a full mouth rehabilitation including anterior ceramic crowns and posterior crowns, bridges and/or implants. This was encouraging for the patient except with respect to the cost. The patient's budget was limited to a maximum of two or three crowns at this time.

Clinically, all the existing abutment teeth were restorable except for the left maxillary second bicuspid, which had been pushed out of

the arch contour by the forces of the existing mobile bridge. The practitioner uncomfortable extracting all these potentially restorable abutment teeth due to finances, yet, the occlusal scheme was so compromised that the case had to be approached as a full mouth rehabilitation. The Snap On Smile (SOS) (DenMat, Santa Maria, CA) presented as the best overall solution. The difficulty was the question of how to deal with existing prepared teeth.

It was decided to try a reverse engineering approach. All the abutments would be uncovered, existing cores removed, and more fully contoured cores would be placed such that they would provide adequate retention for the SOS.



FIGURE 9—Snap-On Smile delivery.



FIGURE 10—Maxillary Snap On Smile, occlusal view.



FIGURE 11—Happy patient smiling.



FIGURE 12—Both patient and dentist are satisfied with the SOS treatment.

The SOS would be used to replace the worn tooth structures in the anterior regions, the missing teeth, and to re-establish a functional occlusion.

TREATMENT SEQUENCE:

1. A mock up was done to determine the ideal tooth size of the central incisors (Fig. 5).
2. Resin was placed on the linguals of the mock-up centrals (Lucia Jig with resin) to create a flat plane deprogramming effect in order to establish the centric relation as well as adequate space for a vertical opening of the occlusion (Fig. 6). A bite registration to be used at the preparation visit was recorded.
3. Study casts were sent to the DenMat laboratory to pre-determine the feasibility of the treatment plan.
4. After review of the case the DenMat SOS lab created a wax-

up of the proposed treatment.

5. The patient was anesthetized and all the failing bridges were removed, existing restorations and bases were removed, and the teeth were rebuilt with Core Paste (DenMat, Santa Maria, CA) (Fig. 7). The cores were placed with matrices to increase their overall size and contour as advocated by the SOS lab technician.
6. Vinyl polysiloxane impressions were taken.
7. Provisional restorations were fabricated for the patient.
8. The impressions and bite registration, the shape and contours of the desired Snap on Smile, and the selected restoration color were sent to the SOS lab.

SNAP ON SMILE DELIVERY APPOINTMENT

1. The transitional bridges were removed.
2. The Snap on Smile appliances

(Fig. 8) were snapped over the existing teeth without the need for any adjustment.

The patient was very excited as the restorations snapped into place and she was filled with anticipation as she was handed the mirror. The following is very typical of all patients at delivery of the Snap On Smile makeovers. First there was speechlessness, followed by a look of incredulity. Her new appearance began to sink in. (Fig. 9) An occlusal view of the maxillary SOS appliance indicates where the acrylic covers the dentition and other areas where natural occlusion remains (Fig. 10). The patient is no longer afraid to smile. (Fig. 11)

From the practitioner's perspective the smile makeover is a tremendous practice builder. (Fig. 12) In fact, the patient had so many

friends that were impressed with this major smile change, that she referred three new patients over the next two weeks!

At the post insertion visit, the patient described how comfortable she found the appliance to be and that she was able to eat any and all foods with her new teeth. She volunteered that she had a renewed faith in restoring her smile and could foresee the possibility of proceeding with a more comprehensive treatment plan in the future.

The appliance can be worn briefly or for longer periods of time. The SOS appliance establishes ideal esthetics *and* occlusion. When fabricated as part of a comprehensive restorative treatment, the SOS appliance can be sectioned during the cementation

of the definitive restorations and used to maintain the esthetics and occlusal scheme during that final step.

CONCLUSION

There are many challenges in smile makeovers and full mouth rehabilitations, not the least of which is affordability. The SOS overcomes many of these temporal and financial challenges. The immediate cosmetic change offered by the Snap On Smile is, of course, the most compelling aspect of the patient experience; the practitioner's perspective is that SOS patients report generally improved overall function as well. The immediately and prominently visible results of Snap On Smile makeovers serve to raise patient awareness of the true potential of their smiles and help to motivate their allocation of interest in and

funding of future comprehensive esthetic dental treatment. **OH**

Dr. Rosenberg's practice specializes in restoring the look and function of aging smiles using porcelain veneers, crowns and implant-assisted bridges. The practice includes oral-facial dermal cosmetic procedures with anti-aging injectables, such as dermal fillers (Juvederm®) and Botox®.

Dr. Rosenberg has invented several dental devices and holds eight patents including the world's first, non-invasive, full arch periodontal measuring device – Perio Alerttm.

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