The patient, Mary Rajik, is a thirty-seven year-old female who came to me saying, "My teeth are loose and I would like to have them whitened". She also had a loose resinbonded bridge that was six years old on the lower anterior from #25 through 27 and cantilever #24.

Mary had been seeing her former dentist for ten years and he had retired. She visited her hygienist every six months for maintenance. It was her desire to consult with a prosthodontist for a full examination and occlusal evaluation.

Three treatment options were presented to the patient for the central incisors:

- Extract and place implants with bone grafting and connective tissue grafting. The approximate time line for this procedure is twelve to fourteen months and the prognosis of the aesthetic result – compromised.
- 2. Orthodontic extrusion of #8 and 9 and implant placement with possible connective tissue grafting. The approximate time line would be ten to twelve months and the prognosis of aesthetic result – good to compromised.
- 3. Endodontic treatment and splinting #8 and 9 with an Authentic bridge. The approximate time line would be one to two months and the prognosis of aesthetic result – excellent.



Dean Vafiadis D.D.S.

Mary opted for treatment number three.

After examining the patient, she was referred to a periodontist for pocket and bone evaluation and the long term success of her upper and lower anterior teeth. Full periodontal scaling and root planning was performed before prosthetic work began.

The patient then had an implant evaluation for the central incisors, but chose not to extract and place implants because of the potential for a severe hard tissue defect that would not have been aesthetically acceptable.

Mary then visited an endodontist for evaluation of vitality on the upper and lower anterior teeth. Teeth #8, 9, and 26 were treated.

Efficient Treatment Planning for Ideal Aesthetics

The case was treatment planned, pre-operative photographs were taken and pre-operative models were made. We then did a Smile Design and presented this to the patient using imaging software by SmileVision.com. I then proceeded to make models and a full contour wax-up was prepared to imitate the Smile Design.

At that point, I further consulted with the patient about

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Using AUTHENTIC[™] Porcelain to Achieve Aesthetics with Splinted Restorations

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the shade that she desired for her restorations and discussed other special considerations about the case with her. An Occlusal Design set-up was prepared for Canine Guided Occlusion. Although the long term success of #8 and 9 was questionable, it was the least destructive and invasive option for Mary.

The Patient's First Visit

For preparation of the teeth, a prep guide and temporary index of the wax-up were used. Preparation of the upper arch was completed in about fortyfive minutes. Teeth #24 and 25 were extracted from the lower arch and preparation of the other teeth was accomplished in twenty minutes. A final impression of both the upper and lower arch was taken requiring thirty minutes time.

Using the wax-up as my guide, a provisional upper arch was prepared using Luxatemp Shade B1 to full contour. This procedure took approximately one hour and thirty minutes. Preparation of the provisional lower arch and an analysis of the patient's occlusion at this time involved forty five minutes.

The total time of the Preparation visit was approximately four hours.

The Patient's Second Post-operative Visit

When the patient returned for her second visit, her occlusion and embrasures were checked. It was now time for her to confirm the shade that was selected for her new

66...it was the least destructive and invasive option for Mary.**99**

restorations. Her contours were also discussed and final approval was given.

Photographs of the provisionals were then taken and an alginate model was made for laboratory communication purposes.

The patient signed the approval form and the total time required for the second visit was about fifteen minutes.

The Patient's Third Visit

At her third visit, Mary's

The upper arch was then iso-

lated using a rubber dam and

the restorations were seated.

For optimal stability, ceramic

teeth #8 and 9 were splinted

with Authentic[™] porcelain.

After completing the upper

arch, the lower teeth were then

isolated in the same manner as

were the upper. A lower bridge

was fabricated of AuthenticTM

temporaries were removed.





porcelain with a metal substructure, but having buccal butt porcelain. The bridge was cemented with dual-cure cement from Ivoclar.

The occlusal design was checked and anterior guidance was confirmed. The ceramics were polished to remove excess cement and to bring out the luster. The time required to remove the temps and insert the case was two hours and thirty minutes.

The Final Visit

At Mary's final post-operative visit, her occlusion was checked and "after" photographs were taken. Oxygel was prescribed for sensitivity.

The happy patient left with a beautiful new smile!

Dr. Vafiadis is a clinical associate professor at NYUCD. He is a Prosthodontist at the New York Smile Institute for Aesthetic and Implant Dentistry in New York City.

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