restore with implant prosthesis. However, still these procedures are debatable in complications and prognosis. In this presentation, authors used distraction osteogenesis procedures to increase the severly atrophied posterior mandibular alvolar ridges vertically using dental implants and customized devices preceding the final implant placement, and those missing teeth have been restored with implant supported bridges. Basic animal researches also will be presented followed by the clinical presentations.

OV-7 A Study on the Effect of UV Light Absorber on the Color Change of Maxillofacial Silicone

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The color change of maxillofacial silicone has been attributed to certain environmental factors such as exposure to the UV component of natural sunlight, wetting and drying of the elastomer, and surface abrasion resulting from the application and removal of cosmetics.

The purpose of this study was to evaluate the color change of maxillofacial silicone (Silastic MDX4-4210) according to type of pigment (cadmium yellow, titanium white, cosmetic red), and UV absorber application method after 200, 400, and 600 hours of 350nm UV light irradiation.

The results were as follows.

1. According to type of pigments, after 200 hours cosmetic red showed significantly larger color change than cadmium yellow and titanium white, and after 400 and 600 hours color change significantly decreased in the order of cosmetic red, cadmium yellow, and titanium white ($p<0.05$).
2. In the cadmium yellow group, the color change according to UV light absorber application method indicated that, after 200 hours, the non-treatment group showed significantly larger color change than the surface application and mixed group, but after 400 and 600 hours, color change significantly decreased in the order of non-treatment, surface application and mixed group ($p<0.05$).
3. In the titanium white group, the color change according to UV light absorber application method showed that there was no significant color change difference between the three groups after 200 and 400 hours, but after 600 hours, the mixed group showed significantly smaller color change than the non-treatment and surface application groups ($p<0.05$).
4. In the cosmetic red group, the color change according to UV light absorber application method showed significant decrease in color change in the order of non-treatment, surface application and mixed group ($p<0.05$).

From the results above, the effect of UV light absorber differed according to the type of pigment, but mixing UV light absorber with maxillofacial silicone is thought to give superior resistance against UV light irradiation in the long run.