Chameleon qualities

How to mimic natural tissue color in the connective gingival

**LUKE S. KAHNG, CDT**

We sometimes struggle to match a patient’s tissue color. The tough connective gingiva, which lines the base of the teeth, is part of the lining of the mouth. Not only does it surround the teeth, it also produces a seal. Unlike the soft tissue linings of the lips and cheeks, most of this gingiva is tightly bound to the underlying bone which aids in resistance of the chafing of food as it’s chewed.

This tissue color is not always definitive, but if healthy, it is often called “coral pink.” Colors such as red, white or even blue may indicate inflammation due to plaque. However, we must also consider racial pigmentation, because this can make the tissue appear darker. The most significant issue then is color antagonism.肖克 of different colors, lighter or darker, could indicate a concern.

In texture, healthy gingiva is firm, does not move, and often exhibits stippling, or a speckled appearance. Unhealthy gingiva, on the other hand, will often present as puffy and spiny. Yet if the tissue color does not blend properly, it ruins the effect of the final restoration.

Tissue color also affects the size of the teeth and the tint of our combined porcelain colors. When we recreate tissue, we have to keep in mind that a patient’s smile is in large part influenced by that color.

In the past, we could only mimic tissue color by adding or mixing together modified colors with pink porcelains. But the GC Initial™ 21 Gum Shade Set System (GC America) now includes the 21 and MC gum shades with six color choices. Included are Frame Modified Gum, Base Dark, Intensive Red, Intensive Violet, Base Light and Intensive Cream. The individual steps can be divided between different firings, according to the standard layering technique.

**CASE STUDY**

As mentioned above, from the different skin types people exhibit, we can safely assume their tissue color will also be unique. When the author is assigned a restoration such as the one we see in Fig. A, he will match tissue color by overlaying the solid porcelain color with a pink tone.

In the newly updated Chameleon Shade Guide™ System (LSK121 Oral Prosthetics), there are nine total tissue colors all created, categorized and photographed. With the three possible soft tissue colors we see here, he is attempting to match this patient’s shade, which appears to be a light pink with slightly darker tones at the gingival. Ultimately, that dark color will be covered when the restoration is completed.

The temporary implant crown on tooth No. 10 demonstrated in Fig. B is long, as the reader can clearly see, compared to the tooth Nos. 7 and 8. The two will need to be matched at the gingival area (Fig. C) which is the reason for the pencil line the author drew—in order to mimic what is adjacent. The technician created five different pink tissue color possibilities (Fig. D). Shown here for the reader are numbers GM 23, 24, 34, 35 and 36—tissue-colored, light-curable micro-composites—Gradia gum shades that allow the technologist to naturalize the existing restoration to give it color, texture, translucency, and wearing of natural gum tissue. These three shade colors are offered in three composite viscosities: a liquid, a gel and a paste. These alternatives afford the user almost unlimited combination of colors and textures and even allow the anatomy of the restoration to be enhanced in terms of root structure, tissue connectors and rugae. Gum fibers are even available to imitate the natural blood vessels in the oral cavity.

Fig. E is applied over the top of this he then applied the GC C-LF (clear fluorescent) for the particular restoration in order to match the patient’s gum color. The technician creates the process of applying each shading layer to the restoration in order to accomplish the color goal he has set out to complete. Over the top of the tissue created and applied the GC C-LF to (Fig. E), which is the reason for the pencil line the author drew—in order to mimic what is adjacent. GC Initial™ created five different pink tissue color possibilities (Fig. D).

There are five possible shades colors for the gum area, with shade tabs and paper (Fig. E) available for the technician, opening up multiple possibilities when it comes to creating a beautiful and lifelike restoration. On a mirror, the shade tabs and paper (Fig. E) are available for the technician, opening up multiple possibilities when it comes to creating a beautiful and lifelike restoration.

**CONCLUSION**

The technician will find this product to be especially nice for use with restorations such as the implant crown we demonstrated, or for denture work as well. There is no mix involved which makes it easy to use. Maximum results can be achieved with very little effort necessary. And, as we can see from the photos, the end result is pleasing to the eye.

**ABOUT THE AUTHOR**

Luke S. Kahng, CDT, is the owner of LSK121 Oral Prosthetics, a dental laboratory in Naperville, Ill. He has published more than 50 articles in major dental publications. He is the author of three recently published books, including Anatomix from Nature, with 50 illustrated pages of full-contour wax-ups, stone models, and porcelain teeth, all re-created using LSK121’s Lab Guide; the Esthetic Guide and the 50 Case Studies. There are five possible shades colors for the gum area, with shade tabs and paper (Fig. E) available for the technician, opening up multiple possibilities when it comes to creating a beautiful and lifelike restoration. On a mirror, the shade tabs and paper (Fig. E) are available for the technician, opening up multiple possibilities when it comes to creating a beautiful and lifelike restoration.

luke.s.kahng@dlpmagazine.com