Creating beauty

Marlúcio de Oliveira explains the physical requirements for an aesthetic smile.

Beauty is undoubtedly in the eye of the beholder. However, regardless of the subjective perception of beauty there is also a widespread image of ideal beauty for the human face that is based on objective parameters. This favourable overall impression comes about through a combination of pleasing proportions and symmetry and harmonious congruence of bone structure, eyes, nose and mouth. In this respect the lips, gums and teeth are of particular importance for the image we have of ourselves and the perception others have of us.

The effect of a beautiful smile is common knowledge. An appealing smile is characterised by a well-proportioned, symmetrical balance between the teeth themselves, and between the teeth and gums and the lips and face. The gum should enclose each tooth in a parabolic arc at the neck of the crown, with the zenith (the highest point of the gum) lying within the distal area of this circumference. Ideally, the interdental papillae should be level with the cervical third of the teeth.

Aesthetic defects in the anterior region, such as missing teeth and/or gum or a receding gumline, may cause patients to lose self-esteem and result in a lack of confidence and feelings of inhibition. This may in particular be an extra burden on adolescents, who are already
Aesthetic Dentistry

Modern dentistry is now able to change and recreate the shape, colour and texture of the teeth. Recent years have been characterised by constant improvements in the techniques and materials used for cosmetic aesthetic dentistry, with a key role being played in particular by ‘pink aesthetics’. This trend has come about through scientific advances and in response to social and cultural pressure regarding an increasingly pronounced ideal of beauty. The treatment of gingival recession presents the dentist with a special challenge, particularly when it comes to ‘black holes’ and the aesthetic correction of interdental papillae in the anterior region of the mouth.

In the past it was acrylates that were used to artificially reproduce the gum. Later on, a selection of ceramics also became available for the prosthetic replacement of gingival tissue. However, individual shade matching proved difficult with these materials due to the production process involved. Aside from that, these were materials designed for fixed or removable prostheses, so they were not suitable for restoring single teeth.

The attention of researchers and manufacturers subsequently turned to the development of gingiva-coloured materials which can be modelled inside the oral cavity. They provide for customised shade matching and permit adhesive attachment to the dental hard tissue.

Today it is therefore possible to restore exposed dental necks with light-curing composites which can be individually matched to the colour and texture of the gum and thus help to lend well-balanced proportions to the teeth.

The aesthetic restorative material Amaris (Voco) was used to treat the following clinical case of a 15-year-old patient, who presented with an uncommon example of tooth fusion (synodontia) of the maxillary incisors 11 and 12 and, respectively, 21 and 22, including a diastema. The aesthetic gingiva-coloured restorative Amaris Gingiva (Voco) was selected here to simulate the gums. This case proved that minimally invasive methods are also suitable for treating major aesthetic defects in the immediately apparent anterior region of the mouth, thus providing a young patient with a perfect smile.