

Functional and postural aesthetic harmony with a new composite material

case report

Fast, functional aesthetic solution for anterior tooth trauma





LightWalker

The highest technology dental laser system

Supreme clinical results:

- TwinLight® Perio Treatments
- TwinLight® Endo Treatments
- No-sutures soft-tissue surgery
- Patient-friendly conservative dentistry
- Pre-sets for over 40 applications

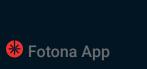
Unmatched simplicity of use:

- Balanced and weightless OPTOflex® arm
- Nd:YAG handpiece detection system
- Quantum Square Pulse technology for fast minimally invasive treatments
- X-Runner[™] the first digitally controlled Er:YAG dental laser handpiece

Visit Fotona's booth (Hall: 10, Plain: 2, Aisle: M, No: 050) to find out more about our latest high-performance, ASP-powered LightWalker laser systems and minimally invasive dental solutions.









Dr Sushil Koirala

Editor-in-Chief

Dear readers,

Happy 2019 and season's greetings to you all!

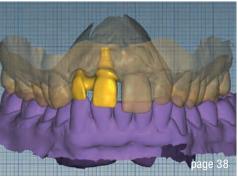
Beauty is difficult to define, as it lies in the eyes of the beholder. The same can be said about a beautiful smile. Contemporary cosmetic dentistry has tried to define the beauty components of a smile using the various objective criteria of smile design principles (macro, mini and micro), such as the mathematical relationship between dentogingival and facial anatomical landmarks. However, in recent years, the trend in treatment planning and smile design tends towards the one-size-fits-all approach, with undue focus on micro-aesthetic components and artistic detailing of teeth and gingivae, ignoring long-term health and the customer's right to choose the smile he or she desires. Various studies have shown that customers appreciate and desire aligned, brighter and harmoniously contoured teeth and gingivae, and actually do not have much interest in the mathematics, formulae and artistic detailing of micro-components of smile design principles that many cosmetic dentists talk about nowadays. The trend towards various digital smile design techniques and the surfeit of porcelain veneers and crowns in smile enhancement procedures have made cosmetic and glamour dentistry unnecessarily invasive, technique-sensitive and less affordable for customers worldwide who desire beautiful smiles. Therefore, in order to make contemporary cosmetic and glamour dentistry simpler, affordable,

healthier and customer-centric, I introduced the Smile Makeup concept and its treatment protocol to the field of cosmetic dentistry in 2017 at the tenth World Congress of the International Federation of Esthetic Dentistry in Japan. The aim of Smile Makeup is to serve the general public globally by delivering beautiful, stylish and aromatic smiles at minimal biological, financial and time cost. The Smile Makeup concept is based on three primary naturo-mimetic components of beautiful smiles: alignment, brightness and contour of teeth and gingivae, and personality and health as secondary components whereby the style and aroma of the smile are enhanced according to the wishes of a customer. I hope that the Smile Makeup service will become a simple and affordable beauty and glamour package for the general public worldwide and encourage all interested cosmetic dentists to assume a key role in the ever-expanding global beauty and glamour market.

In this first **cosmetic dentistry** issue of 2019, we have included various clinical articles and product information related to the latest trends in cosmetic dentistry. I hope you will enjoy reading it.

Sincerely, Dr Sushil Koirala Editor-in-Chief







Cover image courtesy of Ollyy/Shutterstock.com

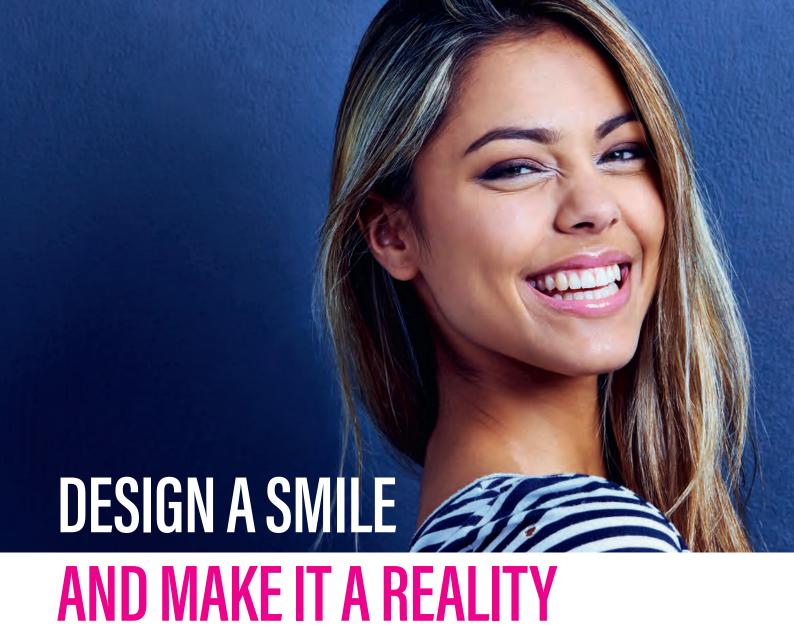


editorial

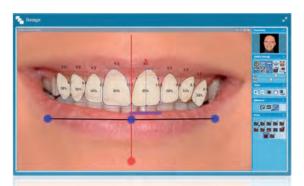
Dr Martin Weber

Editorial	
Dear readers Dr Sushil Koirala	03
trends & applications	
Smile Makeup concept—Creating beautiful, stylish and aromatic smiles Dr Sushil Koirala	06
industry report	
Functional and postural aesthetic harmony with the new composite material Enamel Plus HRi Bio Function Dr Irene Franchi	10
Daily aesthetic dentistry: The contribution of the spectrophotometer Dr Edouard Lanoiselée	16
Correction of VDO: Fully digital workflow, integration of dental scanner, DSD and CAD/CAM Drs Miguel Stanley, Ana Gomes Paz, Inês Miguel & Christian Coachman	18
Dual-wavelength laser in aesthetic and prosthetic dentistry Drs Bogdan Crisan, Liana Crisan, Mihaela Baciut, Prof. Grigore Baciut, Drs Simion Bran, Horatiu Rotar, Adrian Petrutiu, Darius Tomina, Cristina Dinu & Cristian Dinu	22
Minimally invasive dentistry with Er,Cr:YSGG Drs Christina Karanasiou & Dimitris Strakas	26
case report	
Periodontal aesthetics with soft-tissue lasers Dr David L. Hoexter	30
Fast, functional aesthetic solution for anterior tooth trauma	34

Immediate placement and restoration of a Straumann BLX implant replacing maxillary incisors Drs Karim Dada, Léon Pariente, Marwan Daas & Julien Montenero	38
manufacturer news	44
meetings International events	46
about the publisher	
submission guidelines	48
international imprint	50



Use the Planmeca Romexis® Smile Design software to design beautiful smiles and bring them to life with the Planmeca FIT® chairside CAD/CAM system.



Download your free trial today! www.planmeca.com/online



Find more info and your local dealer!

www.planmeca.com















ANMECA

Smile Makeup concept— Creating beautiful, stylish and aromatic smiles

Dr Sushil Koirala, Nepal



Beautiful Aromatic Stylish Smiles

Fig. 1: Smile Makeup logo.

Fig. 2: Smile Makeup concept.

A person's face is his or her most easily recognised physical feature, and facial attractiveness plays a key role in social interaction. It influences success in finding a romantic partner and in kinship opportunities, personality evaluations, performance and employment prospects.¹⁻³ It has been found that the eyes and the mouth are the most important features in a hierarchy of characteristics for determining facial beauty.⁴

Facial and smile attractiveness are closely linked and mutually influenced by aesthetic enhancement. As the mouth is the centre of communication in the face, the smile plays an important role in facial expression and appearance.

The use of facial make-up is universal and has grown rapidly in recent years. The science and art of facial make-up is fast expanding in societies around the world, with small subspecialist areas, such as eye make-up, lip make-up, ear make-up, hair make-up and nail make-up. However, cosmetic dentistry (smile enhancement, smile rejuvenation, aesthetic dentistry, smile makeover, anti-ageing dentistry, etc.) is still considered an elective dental procedure rather than one of the key components of enhancing facial attractiveness in a person. The conventional cosmetic dentistry approaches (which are complex, technique-sensitive, invasive, time-consuming, dentist-centric and costly) make it difficult for dentists to assume a key role in the cosmetic and glamour market. After working in the field of cosmetic and glamour dentistry for more than 25 years, the author has found that cosmetic dentists around the world generally do not work in collaboration with local beauticians, make-up artists, fashion



Fig. 3: Smile Beauty elements.



Fig. 4: Smile Makeup Index beauty elements.

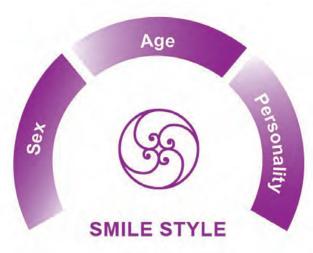


Fig. 5: Smile Style elements.

designers, personality groomers, fitness trainers, etc., all of whom are constantly dealing with a public desiring beauty and glamour. A number of years ago, the author initiated Beauty Club—Nepal and started working closely with many local non-medical professional groups dealing with the beauty, personality, fashion and glamour business. The author believes that his close professional relationship with such groups has helped him to understand the huge and unexplored dental market within the beauty and glamour field and the negative perception that the general public has towards conventional cosmetic dentistry approaches. With the public's perception and his aims for cosmetic dentistry in Nepal in mind, the author developed the Smile Makeup concept and protocol in 2014 and started providing exclusive Smile Makeup services to his customers. To his surprise, Smile Makeup became very popular within a short period among the general public, and in 2017, the author officially presented the concept of Smile Makeup to the world of cosmetic dentistry at the International Federation of Esthetic Dentistry World Congress in Japan, with the professional aim of developing Smile Makeup services as a common beauty and glamour icon for the general public and encouraging



Fig. 7: Smile Aroma elements.

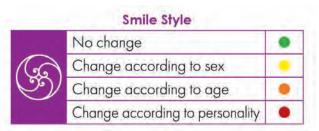


Fig. 6: Smile Makeup Index style elements.

cosmetic dentists around the world to assume a key role in the ever-expanding global beauty and glamour market (Figs. 1 & 2).

Smile Makeup definition

Smile Makeup is an innovative advanced dental procedure designed exclusively to enhance and harmonise the smile and facial attractiveness of a person at minimal biological, financial and time cost.

Smile Makeup

- modifies the beauty, style and aroma of a compromised smile and creates synergistic effects to enhance and harmonise the facial attractiveness and smile;
- is painless with minimal biological cost;
- is a fast, predictable, affordable and healthy procedure compared with conventional cosmetic dentistry approaches;
- allows for individual customisation of smile style and aroma;
- can be modified as required or desired;
- does not change existing bite or occlusion, so it is comfortable;
- complements facial make-up in a true sense.

Components of Smile Makeup and Index

Smile Makeup is composed of three basic components of smile attraction and glamour, namely, the beauty, style and aromatic character of a smile. During the Smile Makeup process, the beauty, style and aroma of a smile are analysed using the Smile Makeup Index, which helps to quantify the status of the existing smile objectively in terms of its beauty, style and aroma.

	Smile Aroma	
- <	Normal	
-1)/	Poor oral hygiene	0
-//	Compromised health	
C	Bad oral habits	

Fig. 8: Smile Makeup Index aroma elements.





Case 1—Fig. 9: Aged smile showing loss of enamel microtexture, incisal edge and canine tip attrition, and lack of tooth brightness. Fig. 10: Close-up view of maxillary anterior teeth. Fig. 11: Compromised incisal aesthetic line and not in harmony with the lower lip.

		Smile Ma	keup	Index		
4	400	Alignment		0		
Beauty	Brightness			0		
	Contour					
Style	No change					
	Change according to sex			0		
	Change according to age					
	Change according to personality					
Aroma	Normal			0		
	Poor oral hygiene					
	Compromised health					
	Bad oral habits					

Fig. 12: Smile Makeup Index for Case 1.

Beauty component

Beauty in a smile is a visible component which is generally praised or criticised by a person based on his or her perception about beauty and smile aesthetics. It has been found clinically that even minor defects or disharmony in alignment, brightness or contour of anterior dental components can negatively affect overall smile beauty. Various studies have shown that the general public are not keen on the ideal (formula-based) smile design principles and parameters globally promoted by conventional cosmetic dentistry smile makeover or smile enhancement procedures. Such ideal smile enhancement treatments generally allow dentists to meet their own professional needs (dentist-centric) rather than the needs and desires of customers (patient-centric). In Smile Makeup, the beauty of a smile is judged by considering the alignment, brightness and contour (ABC) of the anterior teeth and gingivae (Fig. 3), and the accompanying Smile Makeup Index is colour-coded according to the treatment complexity of each element (normal: green; mild: yellow; moderate: orange; complex: red; Fig. 4).

Style component

Style is a key component in customising Smile Makeup according to the sex, age and personality (SAP; Fig. 5) of a person. The style component in Smile Makeup is generally guided by the social, cultural, fashion, beauty and glamour trends in a country or region, much of which continuously change with time. During the Smile Makeup process, a suitable smile style is selected based on the person's sex, age and DISC personality type, and the accompanying Smile Makeup Index is colour-coded depending on the basis on which a person wants his or her smile style modified (no change: green; change according to sex: yellow; change according to age: orange; change according to personality type: red; Fig. 6).

Fig. 13 Fig. 15

Case 1—Fig. 13: Frontal view after Smile Makeup. Fig. 14: Right lateral view after Smile Makeup. Fig. 15: Left lateral view after Smile Makeup. Fig. 16: Smile with incisal aesthetic line harmonised with lower lip.

Aroma component

The concept of aroma in Smile Makeup is unique and is included because human beauty is always associated with a pleasant smell or aroma. Smile Aroma depends on a person's health, hygiene (oral health) and habits (HHH; Fig. 7). Problems, such as bad breath, negatively impact the overall personality of a person and his or her oral health in particular; hence, Smile Aroma is considered an additional benefit of the Smile Makeup package that, like a natural flower, provides beauty with aroma. The Smile Makeup Index is colour-coded according to the aroma component (normal aroma: green; compromised aroma owing to poor oral hygiene: yellow; compromised

aroma owing to general health problems: orange; compromised aroma owing to bad oral habits: red; Fig. 8).



Case 2—Fig. 17: Compromised young smile showing increased translucency, reduced macro- and microtexture, broken incisal edges, enamel cracks and stained old composite resin restorations.

Smile Makeup: Knowledge, skills and certification

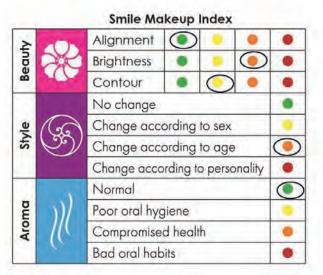
The Smile Makeup concept, protocol and clinical skills can easily be learnt by participating in the MiCD Restorative, Artistic and Orthodontic clinical skills training programmes designed by the MiCD Global Academy (www.micdglobalacademy.com) and conducted independently by MiCD Global Academy-affiliated dental training institutes around the world. These MiCD skills training programmes will help clinicians to become certified Smile Makeup dentists and deliver high-quality Smile Makeup services to their customers.

Case 1

A female patient, aged 54, presented with an aged smile (loss of enamel microtexture, incisal edge and canine tip attrition, and lack of tooth brightness; Figs. 9–11) and requested Smile Makeup without tooth preparation. After a thorough clinical examination and Smile Makeup Index analysis (Fig. 12), Smile Makeup was carried out using tooth whitening and an additive (direct cosmetic enamel restoration) tooth contouring approach (Figs. 13–16).

Case 2

A 32-year-old female patient presented at a Smile Makeup clinic with a compromised young smile, with increased translucency, reduced surface texture, irregular incisal edges, multiple enamel cracks and stained old restorations, and requested Smile Makeup (Fig. 17). After the Smile Makeup Index analysis (Fig. 18), Smile Makeup was carried out using tooth whitening and an additive



Case 2—Fig. 18: Smile Makeup Index for Case 2.

(direct cosmetic enamel restoration) tooth contouring technique (Figs. 19-21).

Conclusion

Smile aesthetics has become one of the fundamental demands of many patients visiting a dental practice, and a growing number of patients are very concerned about the biological cost involved in cosmetic and glamour dental treatments. Therefore, Smile Makeup can provide excellent services for those members of the public who desire beautiful, stylish and aromatic smiles at minimal biological, financial and time cost.

Editorial note: A list of references is available from the publisher.

contact



Dr Sushil Koirala is the President and Chief instructor at the Koirala Dental Academy. He maintains a successful private practice in Kathmandu, Nepal. He can be contacted at drsushilkoirala@gmail.com



Case 2—Fig. 19: Right lateral view after Smile Makeup. Fig. 20: Left lateral view after Smile Makeup. Fig. 21: Frontal view after Smile Makeup.