Multidisciplinary thinking
Integration of Digital Smile Design protocol in Orthodontics

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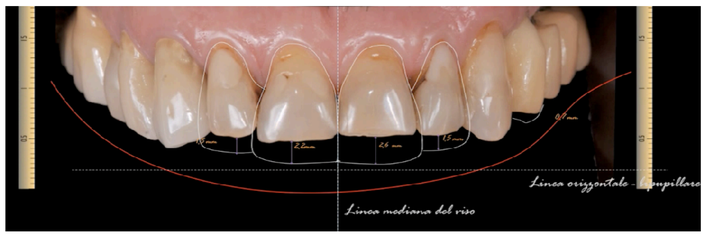
Aim

"Think multidisciplinary" is a paradigm in modern dentistry. Today patients demand a higher level of dental care and this implies an approach that integrates orthodontics, periodontics, prosthetics and surgery. Dentist, Orthodontist and Technician must work together, and nowadays the use of new technologies such as the **Digital Smile Design (DSD)** can improve the communication process among the specialists.

Materials and Methods

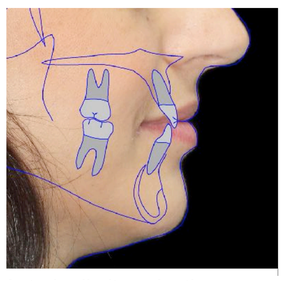
The DSD is a multi-use conceptual dental treatment planning tool that is used in esthetic dentistry to strengthen the overview, improve communication and enhance predictability throughout the treatment.
All the records collected (photo, video and models) are organized in a simple software slideshow (Keynote©-MAC or Powerpoint©-PC) to create a digital drawing of the smile: the virtual profile of the patient can be tested and analyzed even in his absence. Further, the individual files can be easily viewed by all members of the team using modern file-sharing technology, greatly simplifying the communication.

Key Words
Digital Smile Design
Esthetics
Multidisciplinary

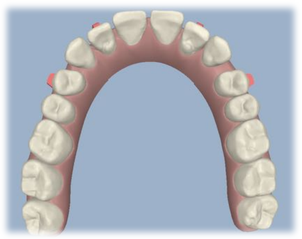


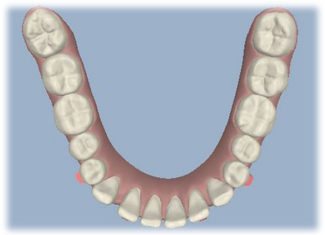
The classical use of the DSD has been integrated with orthodontic analysis: the standard protocol has been combined with the data acquired by orthodontic records, X-ray and 3D digital models and this new protocol has been applied in 15 multidisciplinary patients where it was necessary to move the teeth before prosthetic finalization.

Initial records

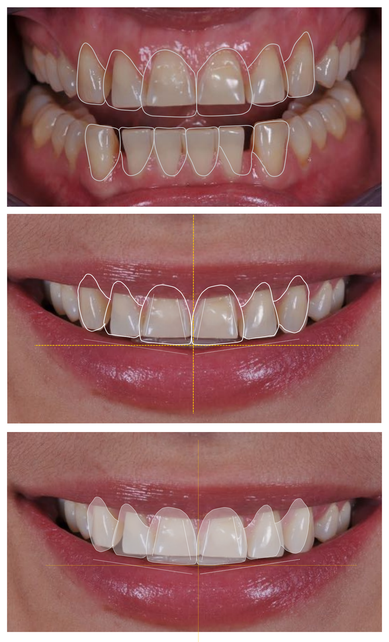


Anterior limit evaluation



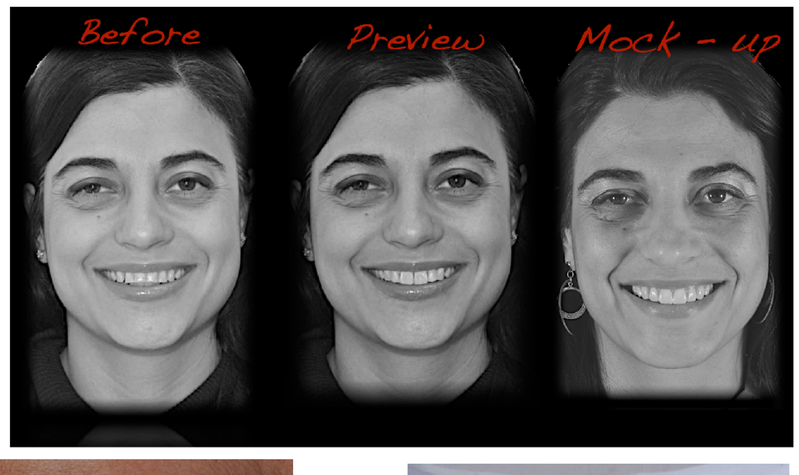


Digital simulation



DSD

Mock-up
Wax-up



Digital ruler
to check the spaces

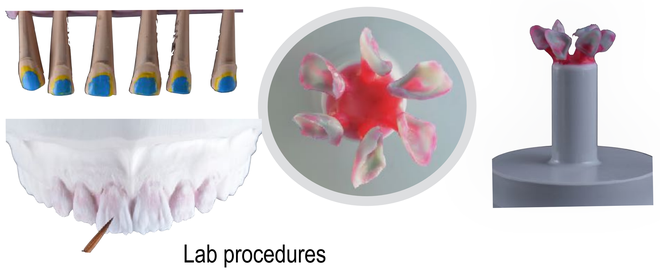
Initial display

Laminate
Veneers

Final smile

Pre-ortho

Post-ortho



Lab procedures

Results

Today patients demand a young and attractive smile. Esthetic treatments often require collaboration among various disciplines to get the best result, and in this multidisciplinary approach orthodontics plays a key role. It is therefore essential for the specialist to know the basics of digital smile and communication protocols between prosthodontist and laboratory.

Conclusions

The integration of orthodontic analysis within the Digital Smile Design and the application of this new protocol have proven to be successful in resolving cases more aesthetically complex.

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Dental Technician: Lab. Pozzi Franco & C. - Parma (ITALY)

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