BOREA

Aesthetic dentistry: «Maryland Bridge» Shade matching with Rayplicker™

Dr Mohammad Abualhaj, Jordan

RAYPLICKER™
ONE VISION • MILLIONS SHADES

Introduction

A 15 years old patient was referred to our Clinic for the restoration of her missing tooth number 12.

Unfortunately , this patient has a bad experience with dentistry, a dentist did an implant for her when she was 13 years and it failed. « Anyone may have failures but it is unacceptable to do an implant for a 13 years old patient » then she was treated from an orthodontist who referred her to our clinic, Miral Dental Center in Jordan.

fig. 1, Shade matching using the spectrophotometer Rayplicker™
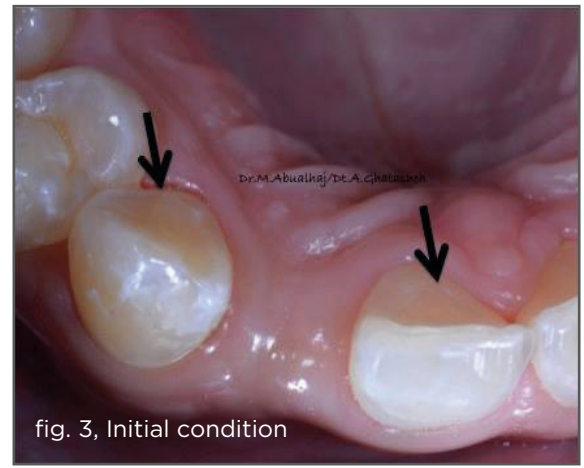
fig. 2, Initial condition

fig. 3, Initial condition

Case report

For this patient, I decided to make a Maryland bridge until we can do an implant for her. Shade matching was done using Rayplicker™ shade matching device from Borea company.

Doing a digital analyse thanks to this global solution allowed me to communicated easily with my dental technician.

Shade taking

In order to send a maximum of detailed information concerning the contextual situation of the patient mouth and to ensure the best integration of the «Maryland Bridge», a shade analysis has been performed using the Rayplicker device on the adjacent teeth of the missing tooth n°12 and on the opposite one.

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A reliable and complete analysis was carried out very quickly using the spectrophotometer Rayplicker. This tool allows you to obtain the detailed mapping below.

There is an analysis in nine parts and a detailed analysis under the standard shade guide VITA classical A1-D4® for teeth n°13 and n°22.

Also a detailed analysis in VITA classical A1-D4® as well as a map of the translucency of tooth n°11.
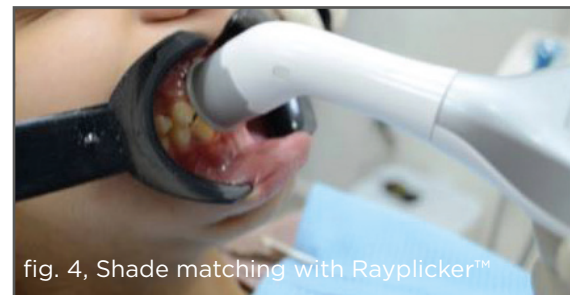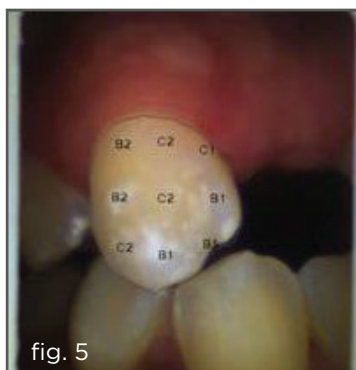

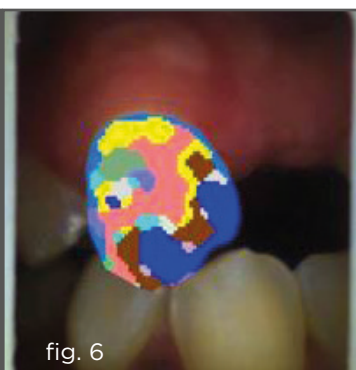fig. 4, Shade matching with Rayplicker™
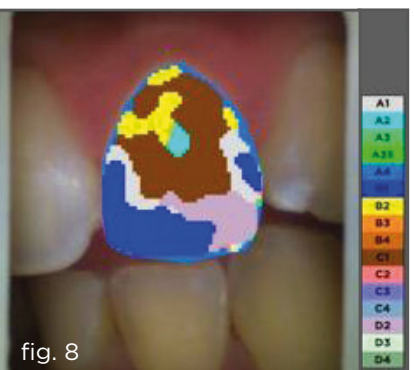

fig. 5, 9 parts mapping, tooth n°13

fig. 6, Detailed mapping, tooth n°13

fig. 7, 9 parts mapping tooth n°22

fig. 8, Detailed tooth mapping, tooth n°22

fig. 9, Detailed tooth mapping, tooth 11

A digital production file is then created on Rayplicker™ software.

Thanks to digital shade matching, all information, including a detailed shade analysis, patient pictures and the production file are saved and transfered to my dental technician A. Ghatashen directly through the Rayplicker™ software (Fig 11). All this while not losing any essential information.
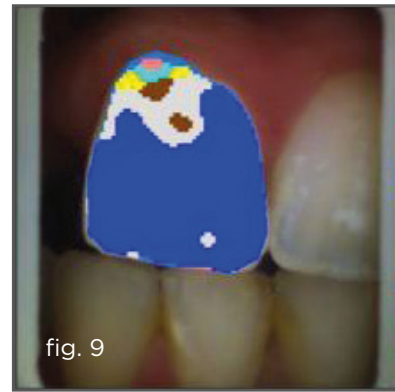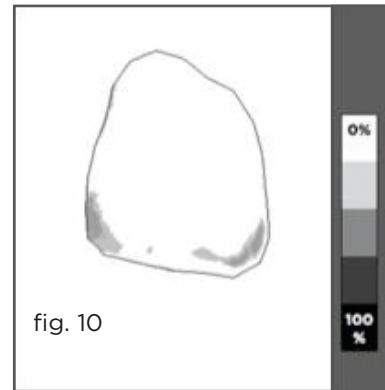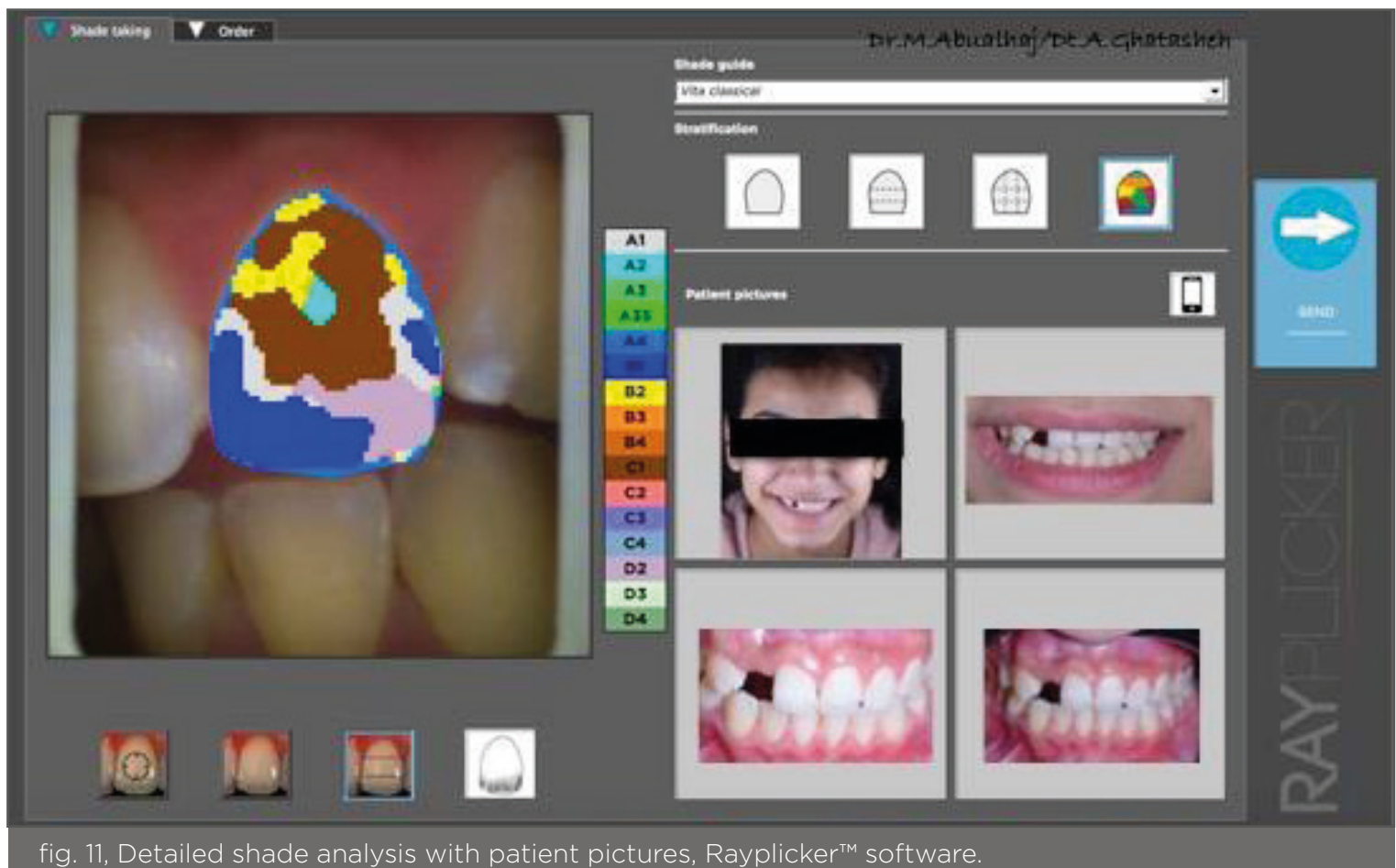

fig. 10, Translucency mapping, tooth 11

fig. 11, Detailed shade analysis with patient pictures, Rayplicker™ software.

Materials and Method

This is the maryland bridge produced by my dental technician A. Ghatashen thanks to the Rayplicker™ software.

The maryland bridge was cemented using Rely X ultimate clicker from 3M company . We can see how natural is the final result thanks to the perfect aesthetic integration of the restoration.

Finally, the patient keep smiling with her natural look new tooth.

fig. 12, Replacement tooth n°12

fig. 13

fig. 14

fig. 15

fig. 13-14-15, final integration of the Maryland Bridge in the patient mouth.

About the author:

Dr Mohammad Abualhaj, Jordan

Dr. Mohammad Abdelmajeed Abualhaj received his BDS, Bachelor from the University of Jordan, Amann – Jordan.

Further Membership of Faculty of Dentistry of Royal College of Surgeons, Dublin, Ireland.

American National Dental Board member and has a Master's Degree in Fixed and Removable Prosthodontics, University of Jordan 2012.

Dr. Mohammad is on the Jordanian Board of Prosthodontics and Part-time lecturer in Jordan University of Science and Technology.

He completed his thesis on: Optimization of colors using Ceramic Stains" New Approach"

Dr. Abualhaj has presented in numerous scientific activities from being the President of the Scientific Committee in Jordanian Dental Association, to lecturing nationally and internationally as well as workshops in Cosmetic and Implantology.

He is an active member in the continuous educational committee of the Jordanian Dental Association from 2013-2016 as well as being the Head of the scientific committee in the 25th International Jordanian Conference 2017.

Fields of interest including Digital and manual Shade Selection, Ceramic stains, Porcelain Laminate Veneers and Smile analysis, Immediate loading protocols, Prosthodontics options in implant dentistry, Biomechanics in implant dentistry, Non-Surgical Soft Tissue management around implant, Emergence profile and gingival carving around implants, Dental implant complications, Occlusal concepts in oral rehabilitation and 3D planning in implant dentistry.

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