A picture can be worth, or deceive, more than a thousand words

Marco **MASIOLI**[1,2]

(**1**) Doutor em Clínica Odontológica, Universidade Federal do Rio de Janeiro (Rio de Janeiro/RJ, Brazil).
(**2**) Universidade Federal do Espírito Santo, Departamento de Prótese Dentária (Vitória/ES, Brazil).

DOI: https://doi.org/10.14436/2447-911x.18.2.154-159.cmc

Submitted: May 03, 2021 - **Revised and accepted:** June 01, 2021

E-mail: marco@masioliodontologia.com.br

How to cite: Masioli M. A picture can be worth, or deceive, more than a thousand words. J Clin Dent Res. 2021 May-Aug;18(2):154-9.

S

"Some pictures are worth a thousand words". With this statement, Professor Katia H. C. Dias began the preface of my first book, "Dental Photography", released in 2005 at the XVI GBPD Meeting in the city of Rio de Janeiro.

The whole text, and in particular this sentence, moved me. Unfortunately, the facility of capturing, editing, and doctoring images with smartphones results in a flood of images spread on social media that do not match reality.

Dentistry fits well in this context. At all times, innumerable cases of doctored, rigged, and manipulated dental images, especially on social media, is unfortunately appalling. Photographs of clinical cases with alterations in color, lighting, and positioning are released and distance the captured image away from reality.

These changes may occur during the image capture or editing, either due to lack of knowledge to control lighting and smartphones or dishonesty, in an attempt to deceive the observer (Figs 1, 2 and 3).

Smartphone cameras are amazing tools to capture dental images, and these images can help dentists document and assess their work in legal demands, in teaching dentistry, in communicating with the patient, among professionals and in marketing. However, to do so, we ought to have standardized and high quality images.

"Photographs of clinical cases with alterations in color, lighting, and positioning are released and distance the captured image away from reality"

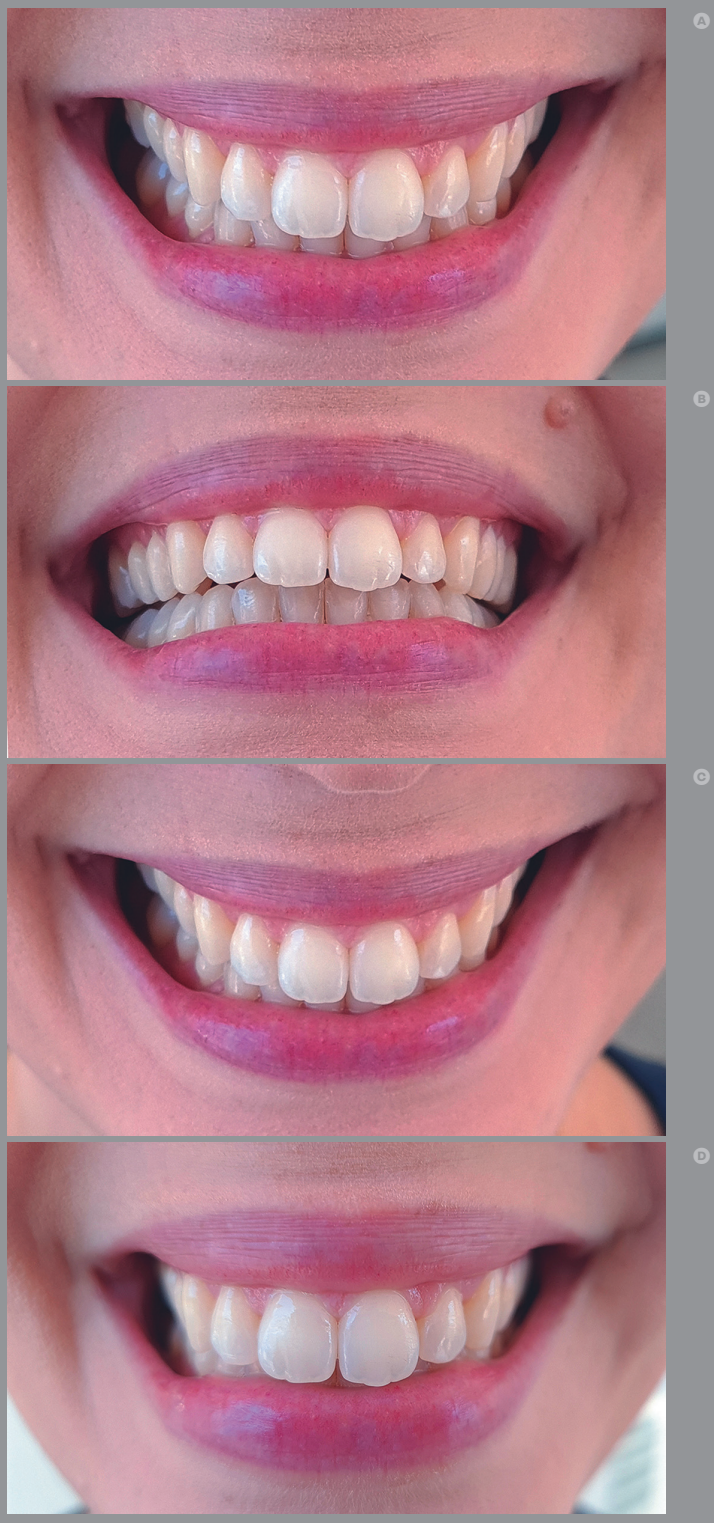


Figure 1: Photographs of the same smile, of the same person, and at the same time with the same smartphone. The distances and positions from the smartphone to the patient provide different images, which is not ideal for clinical photography. (**A**) Photograph of a smile, keeping the ideal positioning and distance smartphone x patient. (**B**) Photograph of a smile, keeping the ideal distance, but with the smartphone positioned a little lower in relation to Photograph 1A. (**C**) Photograph of a smile, keeping the distance and the smartphone positioned a little higher in relation to 1A. (**D**) Photograph of a smile, with the smartphone positioned very close to the patient, causing some image warp, known as barrel distortion.

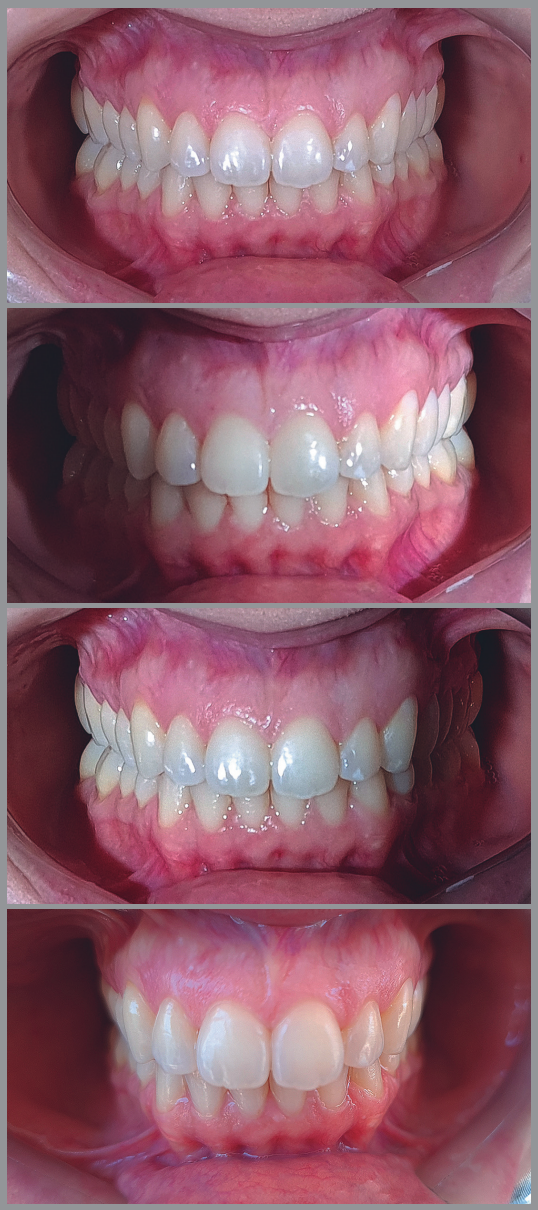


Figure 2: (**A-C**) Frontal intraoral photographs with the same smartphone, standardizing the distance and positioning, but changing the light direction, which produces images that are not desired for clinical photography. (**D**) Frontal intraoral photograph, positioning the smartphone very close to the patient, causing some image warp, known as barrel distortion.

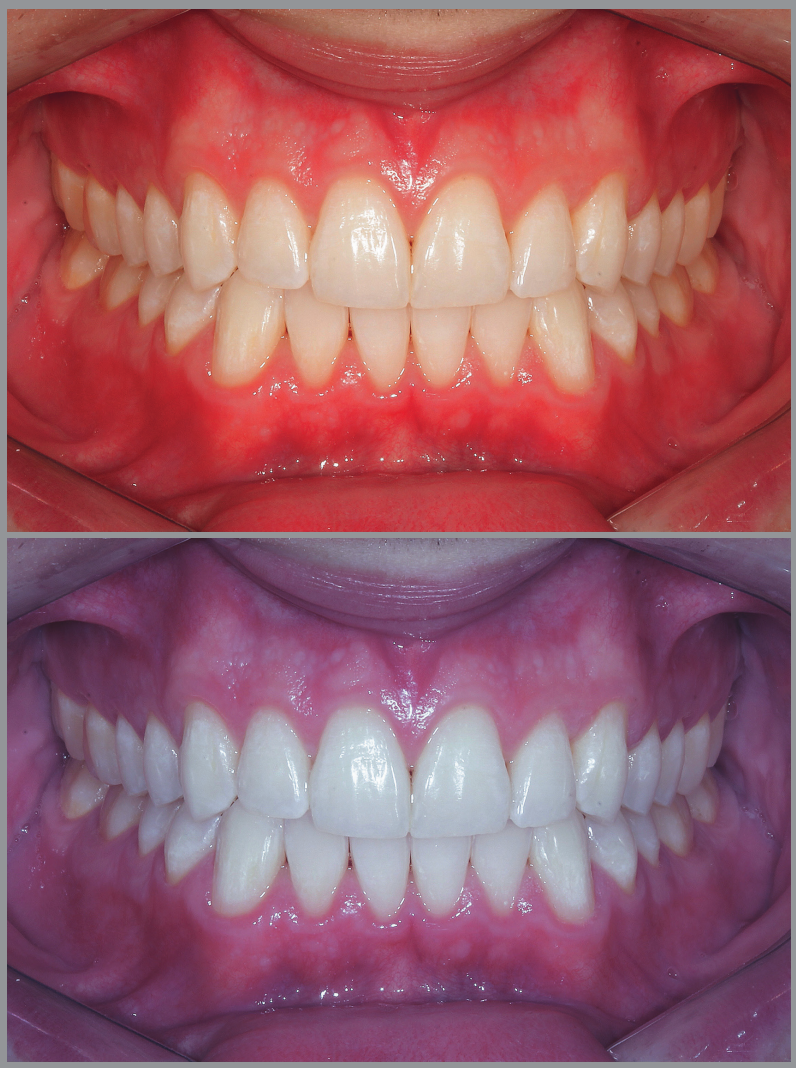
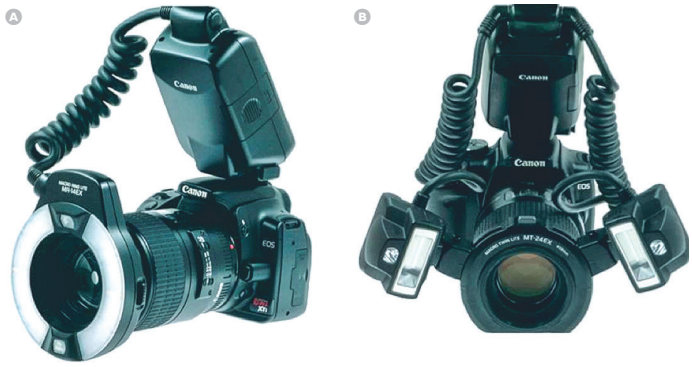
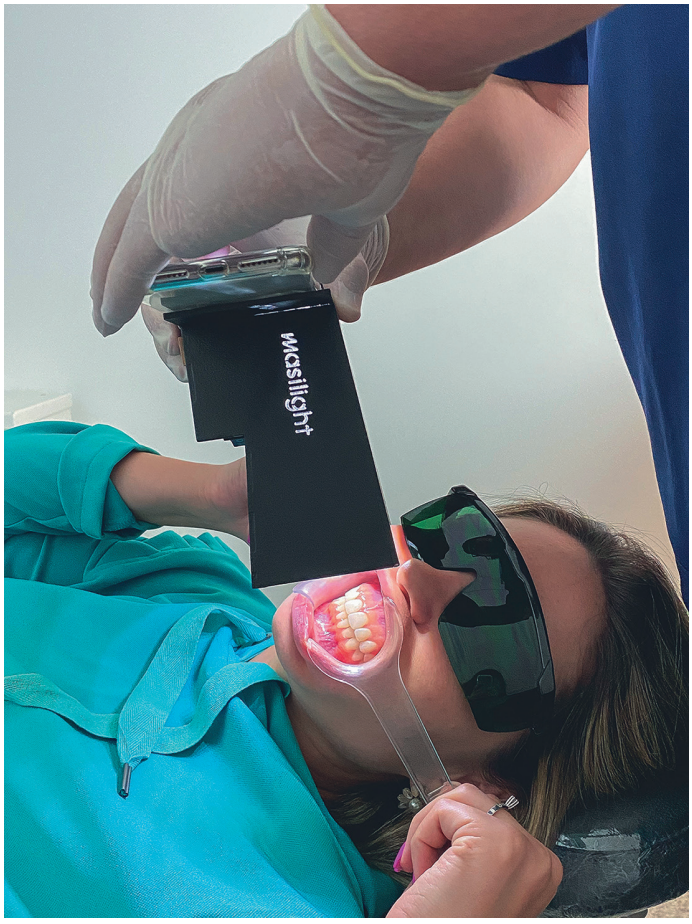


Figure 3: Frontal intraoral photographs with the same smartphone, standardizing the distance and positioning of the smartphone, but changing the color, which produces images that are not desired for clinical photography.



↑ **Figure 4:** Camera, lens and circular flash (**A**) or twin flash (**B**) set.



↑ **Figure 5:** Smartphone set with light and distance pattern Masilight.

The standardization was achieved when we used a protocol that reduced the variables in the image capture process, especially light features, white balance, and the angle of taking photographs. The standardization of images in Dentistry was achieved with conventional cameras (from analog to digital), while almost all the images were obtained by equipping the cameras with a tele macro, with a focal length of around 100 mm and a circular or twin flash (Fig 4). The body or the camera itself was of lesser importance in this set, which although difficult to control, when achieved, it almost always provided standardized, good quality images. Likewise, the improvement and standardization of dental images with smartphones will only be achieved with the use of accessories to standardize distance and lighting (Fig 5), as happened with photographic cameras.

Dental photography with analog and digital cameras took decades or centuries to provide cameras with specific lenses and flashes capable of unifying, freezing, and perpetuating images captured in Dentistry in a standardized real way and with quality. I believe smartphones do an amazing good, popularizing dental photography. What is left for us now is to find ways to capture standardized and authentic images, ethically, responsibly, and respectfully toward our patients, so that these images can be worth more than a thousand words, instead of a million lies.