



Standards in dental photography: past, present, future



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The main purpose of dental photography is documentation. As much information as possible needs to be recorded under reproducible conditions. There must be standardization of the clinical camera, associated equipment, format, and lighting of the intra- and extraoral views used in dental photography. The standards described in the 1980s by Wolfgang Bengel¹ are still valid, but they need to be updated and adapted to align with new technologies and procedures.

Browsing recent literature and guidelines from various dental societies, groups, and educational institutions resulted in a variety of photographic protocols that explain what images should be photographed to plan and document clinical cases. There are, however, many potential sources of error in obtaining this photographic information. Photographs of inadequate quality may misrepresent a patient's initial situation, or they may inaccurately reflect treatment progress or anomalies and defects of hard and soft tissue that may be present.

There are a number of commonly seen errors due to the inappropriate choice or

incorrect use of equipment, including the camera, lens, flash, retractors, mirrors, and suction. There can also be a lack of understanding of digital technology, which can result in the incorrect positioning of subjects and inadequate or inappropriate images. Therefore, training as well as a good understanding of photography is important in order to use photographic equipment as efficiently, accurately, and consistently as possible.

Dental photography can be considered a form of scientific photography because it follows strict rules and principles to document and control dental clinical work in a standardized format.

Today, dental photographs can already be combined with extra- and intraoral scans or cone beam computed tomography images. It seems that three-dimensional (3D) scanning of soft and hard tissue has several advantages over two-dimensional (2D) photography. 3D documentation is already enhancing and will some day replace conventional 2D documentation in our daily work. Although this transformation will reduce the number of errors, especially in the



orientation and positioning of subjects, it will not happen immediately due to the high costs and steep learning curves associated with these new technologies.

Photographs are still a powerful medium of expression and communication, not only in the dental community. They allow the photographer to be either a scientist, following guidelines and rules, or an artist without any limits. The clinician should bear in mind the need to separate the two forms, depending on clinical workflows and specific needs.

This year, the European Academy of Esthetic Dentistry (EAED) organized a second photo contest where all participants at the conference in May were invited to send in images related to

dentistry without the need to follow any rules. After a pre-selection made by a jury, all the conference participants selected their best images. The photographs that won the first three places (printed in this issue) can also be seen online at: <http://sorrento.eaed.org/photo-contest/>

Enjoy reading!

Sincerely yours,
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Reference

1. Bengel W. Standardization in dental photography. *Int Dent J* 1985;35:210–217.