

Surgical video recording system in dentistry and Mobile dental Photography

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With the prevalent use of DSLR cameras for clinical dental photography, the need for collecting and utilizing video data in dental clinical surgery procedures is becoming increasingly urgent in the near future, both presently in 2023 and beyond. While a single clinical photograph can be more convincing than ten pages of patient explanation, a ten-second video is undeniably more effective than one hundred photographs. Times have changed, and high-quality video recording and live streaming are now crucial for acquiring and storing clinical data in all processes of patient diagnosis, counseling, education, and treatment planning. In the clinical field, there is a pressing need for stable, high-quality, and non-shaky video data. Attempting to use more advanced and progressive IT equipment for clinical data acquisition is now an unavoidable choice even from the perspective of Digital Dentistry. Therefore, we will explore an easy approach to clinical photography and video recording using smartphones, which are the most popular and widely used devices that are familiar to patients and have high persuasive power in communication. We will also examine a surgical video recording system that uses action cameras, such as GoPro, to overcome the limitations of video quality on smartphones and provide more convenient usage. We will analyze the quality and angle of the recorded videos and compare their quality to determine their efficacy. Surgical video recording systems can be classified into chair-mounted, head-mounted, and handheld systems, and we will investigate their pros and cons as well as the most efficient methods of implementation. While attempts to use action cameras as recording devices for clinical procedures have been ongoing for a long time, only a few devices have been introduced and sold due to their high cost and difficult implementation. Therefore, we will introduce a surgical video recording system that can be easily established by implant surgeons as well as most general dentists and investigate their application cases and easy utilization methods. Video is now becoming a necessary medium, and there is a pressing need for a more proactive change in dental clinical practices. Paradigm shift is needed for us.

Profile

- * School of dentistry, WonKwang University
- * Doctor of HyunDae dental clinic
- * Director of Web Photo School, Korea
- * Developed DSLR WUSB wireless transmission equipment
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