Generating "Virtual Physicals On Demand" Patient Videos with Standardized "Range Of Motion Protocols" in Plastic Surgery

John S. Eng, MD

Abstract

Background: Today, with the breath taking advances in digital video capture, display and dissemination technology, as seen in portable camcorders and cell phones, more and more people are recording, viewing and sharing their daily encounters and past events with others by videos over photographs. Therefore, it is baffling to understand why today's plastic surgeons are still clinging onto still photography to manage their patients' visual records. Photographic patient images in 2 dimensional medium, without motion, susceptible to cherry picking and vulnerable to photo-shopping, are no match to video images of patients in a 4 dimensional 'live' medium for this purpose.

In order to better document their patients' pre-existing conditions and to evaluate their post surgical quality outcomes, surgeons should consider supplementing or replacing their current patient photographs with videos, although not just any randomly recorded videos. The recording of these before and after surgery videos of a patient undergoing a particular surgical procedure, follows strict and consistent guidelines, that is the "Range of Motion Protocol" specially designed for that procedure by adhering to identical studio setup, indexed motion sequence, command tempo, and comprehensive viewing angles capturing of all the relevant anatomical structures and movements, all under 30 seconds or less.

Methods: 3 "Range of Motion Protocol" video samples are posted on YouTube:

- Face: http://www.youtube.com/watch?v=g1yITBmIKLE
- Hand: http://www.youtube.com/watch?v=X elYPed1sY
- Breast: http://www.youtube.com/watch?v=m3jsbuHICHA

Instructions on how to record these videos can be downloaded from the following website: www.plasticsurgeryinmotion.com (contents subject to periodic updates). After an initial learning curve and with practice, a typical recording session, either performed by the surgeon or any office staff, usually adds about 5 extra minutes to a routine office photographing session.

Results: Present day video capturing devises produce an average of 30-50 frames (pictures) per second. Therefore, a (30 second) video is worth (more or less) a thousand pictures. These patient "ROMP" videos, current or archived are, *de facto*, the patient's 'Virtual Physicals On Demand', always ready for viewing, studying and sharing by all participants of all plastic surgical encounter, namely, surgeons, patients, paramedical personnel, surgical trainees, consultants, attorneys and insurance carriers, all to be profoundly benefitted by these enriched patient data in their own areas of concern.

Conclusion:, Seeing is believing, and the truth shall set you free.

Reference:

1. Eng, J. S. Can Aesthetic Surgeons Be True Artists? Aesthetic Plastic Surgery: Volume 33, Issue2 (2009), Page 137.

Disclosure/Financial Support: This project receives financially supported from Plastic Surgery In Motion, LLC, founded by author.