

## Medical Visual Documentation

Documentation has a very important place in terms of recording and revealing what has been done at every stage of medical history. With the invention of photography, medical photography has become the most important pillar of this documentation. Since medical photography and medical videography are inseparable elements in today's technology, this subject, which is defined as medical photography or clinical photography, has been integrated into the medical literature as medical visual documentation and has been used in both national and international medical literature. Medical visual documentation is used especially in medical education, medical archiving, keeping patient files, forensic records, and all kinds of academic publications and presentations. Medical visual documentation is an important tool both for academic fields and for evaluating the results of the procedure, especially when expressing before and after surgical procedures, showing the stages of wound healing, and defining the stages of diseases.

In the era of analog cameras, there was a professional profession called "hospital photographer". A hospital photographer was called in for the images needed in the clinic, and his ability to use the right "light writing" techniques ensured high-quality medical photographs. With the introduction of digital technology into our lives, this professional profession has become a thing of the past with the fact that every physician and healthcare professional can have their own digital cameras and then these digital camera technologies are integrated into mobile personal devices. The fact that each physician or healthcare worker who has a camera takes their own medical images has resulted in low-quality images obtained by people who have not received photography training. The disappearance of this professional profession and the fact that each physician tries to produce his own medical visual document has basically raised a question, "I wonder if every physician, no matter how good he is in his profession, knows how to take photographs or basically write light correctly?" From this point of view, since 2013, healthcare professionals, especially physicians, if they take their own medical visual documents, then we aimed for them to reach "Good Medical Visual Documentation" with small trainings. In fact, in this concept, where we

try to reveal a kind of medical demonstration, it is tried to teach the fulfillment of 4 basic rules for the formation of "Good Medical Visual Documentation". The basic concepts are obtaining a detailed consent form from the patients or their relatives before each patient or tissue extraction, complying with ethical and medical rules, shooting according to the recommended standards, and finally storing these medical visual documents with secure archiving.

### **Types of Medical Visual Documentation**

Medical visual documentation is grouped into three groups. "Clinical Photography", which includes taking images of the patient while not under anesthesia or awake, taking images for follow-up before and after surgery, and taking control photos for the evaluation of treatment; "Intra-operative Photography", which includes showing the stages of the surgery during the surgery or taking images related to the disease or the procedure performed during the surgery, and "Specimen Photography", which includes taking images of the removed tissue or diseased organs, constitute these three groups.

### **Recommendations for "Good Medical Visual Documentation" in Medical Visual Documentation**

In order to achieve high quality and academic effective results in Medical Visual Documentation, first of all, photographs must be taken at certain standards. A shooting studio environment is recommended in the clinic to meet these standards. If possible, a key (main) light source and a fill light source from 2 different angles should be used. Angles of 45 degrees are the recommended angles for these lights. A camera with an interchangeable lens is recommended for camera equipment. A portrait lens equivalent to a focal length of 50 mm for clinical shots and a macro lens equivalent to a focal length of 80 mm for specimen shots are recommended equipment together with ring flash equipment. A gray or blue background curtain with an 18% gray tone for the background and a light tent for specimen shots are recommended equipment. In particular, the standard distances between the patient and the background and the distance between the patient and the camera, and the use of a tripod are other recommended features. Avoiding zooming, especially in medical videography, and taking stable videography recordings using a tripod are other basic elements. Other rules that are stated as indispensable in medical visual documentation are the

sensitivity to be shown in order not to disrupt the sterilization of the environment with the equipment used in the operating room shooting, the patients must sign a consent form before the shooting, and the medical visual documents obtained are kept in the foreground by storing them on secure servers or hard disks.

The acquisition of high-quality and academically effective medical visual documents will significantly enhance the quality of medical practice.

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