



D52 Photographic Differences Between the Colposcope and SLR Digital Camera With a RAW File

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The goals of this presentation are to list several qualities of a good picture, define and visualize depth of field between a colposcope and a digital camera SLR, and visualize the difference between similar pictures and resolution of the pictures.

The presentation will impact the forensic science community by demonstrating how forensic photography for the sexual assault examiner includes body pictures as well as pictures of the genital area looking for injury, no injury or evidence of pre-existing medical conditions.

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In the past, one of the tools that the sexual assault examiner has used has been the colposcope. Today the trend is moving toward digital photography. Common facts about digital picture quality that most people will agree on are that the picture:

- be in focus
- not to light or too dark
- aligned and not twisted
- represent the subject matter
- not be compressed too much
- has enough image resolution

3D can be defined as giving the illusion of depth. "Depth of Field" in a picture is the distance range in front of and behind the center spot in the picture. As an example, if close up picture displays the center area "in focus" and the outer areas out of focus, the picture has a limited depth of field.

Magnification plays a major role in determining the size of this depth of field range. Generally, the higher the magnification, the lower the depth of field. Using a colposcope, the ocular lens must be adjusted in order to see clearly the separate areas of focus.

This presentation will compare the depth of field, clarity, and all the picture facts for quality of a good photo between a picture taken using a colposcope and a digital camera. Several images similar in subject matter will be displayed for visualization of the difference in resolution and quality of picture. The participant will be able to observe and compare these different technologies and apply the information to their own sexual assault practice.

Many concerns about using digital pictures in court room are often expressed as well, not only by health care professionals but district attorneys. Additionally, the court of law may not be comfortable with secure digital imaging or have concerns that the pictures were not altered or changed.

Digital x-rays, digital sonograms and digital ultrasounds are used every day to make life and death medical decisions in every part of the country and it has been that way for years. These "digital pictures" have been used as legal evidence in medical suits and other such legal cases. That means that the standards for "digital" in the courtroom have already been set.

U.S. Federal Customs Agents capture digital headshot pictures, digital fingerprint pictures, and digital retina scans everyday at every border crossing today. These digital pictures are used to track and identify people, and legally deny undesirables into the county. The U.S. customs agents that interview citizens as they re-enter the country all have digital cameras and fingerprint scanners right at their desks.

This presentation will help the participant review and provide concrete examples for using digital pictures at your hospital or programs. Communication and education of the community will be an important first step to understanding what digital photography can do for evidence that can be brought to a court of law.

Forensic Photography, Colposcope, Sexual Assault/Child Abuse