

Perfect Lighting for Photography in Plastic Surgery: Ring Light

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INTRODUCTION: Photograph is indispensable for plastic surgery. On-camera flashes can result in bleached out detail and color. This is why most of the plastic surgery clinics prefer studio lighting similar to professional photographers'.^{1,2} We want to share a simple alternative: Ring light (Fig.1).

MATERIALS AND METHODS: We took five different photographs of the same person with five different camera and lighting settings (Fig. 2): Smartphone and ring light point and shoot camera (PSC) and on- camera flash; PSC and studio lighting; digital single lens reflex (DSLR) camera and studio lighting; DSLR and ring light. Then, those photographs were assessed objectively with an online survey of five questions answered by three distinct populations: plastic surgeons (n: 28), professional portrait photographers (n: 24) and patients (n: 22) who had facial aesthetic procedure.

RESULTS: Compared to the on-camera flash, studio lighting better showed the wrinkles of the subject. Ring light facilitated the perception of the wrinkles by providing homogenous soft light in circular shape rather than bursting flashes. Combination of DSLR camera and ring light gave the oldest looking subject according to 64% of responders. DSLR camera and the studio lighting demonstrated the youngest looking subject according to 70% of the responders. The majority of the responders (78%) chose the combination of DSLR camera and ring light that exhibited the wrinkles the most.

CONCLUSION: We suggest using ring light to obtain well-lit photographs without loss of detail. We strongly advise not to use smartphone if you want to achieve standardized pictures.

REFERENCES:

1. Yavuzer, R., S. Smirnes, and I.T. Jackson, Guidelines for standard photography in plastic surgery. Ann Plast Surg, 2001. 46(3): p. 293-300.
2. Archibald, D.J., M.L. Carlson, and O. Friedman, Pitfalls of nonstandardized photography. Facial Plast Surg Clin North Am, 2010. 18(2): p. 253-66, Table of Contents.

LEGENDS:

Figure 1: Photograph of DIY ring light.

Figure 2: Photographs of 72-year-old female subject taken with five different camera and lighting settings. Row A: Smartphone and ring light. Row B: Point and shoot camera and its on-camera flash. Row C: Point and shoot camera and ring light. Row D: Digital single lens reflex camera and studio lighting. Row E: Digital single lens reflex camera and ring light.



A



B



C



D



E



