injections, the 32-G needle can be used for 11 injections while the 30-G needle should be used for only five injections. Furthermore, the skin penetration force of the 30-G needle at the fifth penetration was 0.26 N, while the 32-G needle could be used up to the thirtieth penetration. In addition, the 30-G needle was discarded after the fourth penetration, but the 32-G needle could be used until the twentieth penetration at the skin penetration force of 0.24 N (Table 1). A standard reconstitution of 2.5 ml of normal saline was used for 50 botulinum toxin units and 0.1 ml of 2 units was planned for most injection points. Apparently, the physician can change the 30-G needle after half of the insulin in the syringe is injected, whereas the 32-G needle with insulin syringe is discarded when the syringe is empty.

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REFERENCES

1. Alam M, Geisler A, Sadhwani D, et al. Effect of needle size on pain perception in patients treated with botulinum toxin type A injections: A randomized clinical trial. *JAMA Dermatol.* 2015;151:1194–1199.
2. Flynn TC, Carruthers A, Carruthers J. Surgical pearl: The use of the Ultra-Fine II short needle 0.3-cc insulin syringe for botulinum toxin injections. *J Am Acad Dermatol.* 2002;46:931–933.
3. Barolet D, Benohanian A. Current trends in needle-free jet injection: An update. *Clin Cosmet Investig Dermatol.* 2018;11:231–238.
4. Nagai Y, Ohshige T, Arai K, et al. Comparison between shorter straight and thinner microtapered insulin injection needles. *Diabetes Technol Ther.* 2013;15:550–555.

"Zoom Dysmorphia": A New Diagnosis in the COVID-19 Pandemic Era?

The coronavirus disease of 2019 pandemic, widely referred to as COVID-19 (SARS-CoV-2), has dramatically changed the global status quo, as it has serious implications both individually and socially. Governmental guidelines have enforced quarantine as a means of social distancing to get control of viral spread. Social isolation results in stress, acne, hair loss, depression, alcohol/substance abuse, and an increase of youth considering suicide in the United States.[1]

In an effort to sustain existing social connections, people are extensively using digital platforms such as Zoom (Zoom Technologies, Inc., San Jose, Calif.). Real-time web camera communication prevents the use of photo-editing tools. As a result, people have an increased awareness of physical features they perceived as flawed. This exaggerated self-criticism creates a form of body dysmorphia, similar to body dysmorphic disorder, leading to dissatisfaction and a desire to seek cosmetic surgery.[2]

Body dysmorphic disorder is defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (300.7, F45.22). It is associated with obsession over minimal, inconspicuous, or inexistent imperfections in one's appearance. This extreme preoccupation may lead to significant psychological distress, functional impairment in social, occupational, or other areas of life, and even suicidal tendencies. Patients diagnosed as having the disorder are commonly unhappy with the postoperative results from the aesthetic interventions they pursue.[3] Stay-at-home orders, being surrounded by mirrors, isolation, and spending prolonged time on social media and on web camera act as triggers for a full-blown body dysmorphic disorder exacerbation.

In 2019, 72 percent of the American Academy of Facial Plastic and Reconstructive Surgery members reported seeing patients seeking cosmetic procedures to improve their selfies. The exponential increase in Zoom and virtual meetings has led to a high demand for cosmetic surgery.[4]

A survey is indicated to assess the extent of plastic surgery procedures performed in response to "Zoom dysmorphia." During consultations, plastic surgeons should make surgical candidates aware that the camera often distorts facial features due to technical aspects (i.e., focal length).[5] Also, they should take preoperative photographs of the patients, in order to address objective findings, so that patients have realistic expectations.

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REFERENCES

1. Benke C, Autenrieth LK, Asselmann E, Pané-Farré CA. Lockdown, quarantine measures, and social distancing: Associations with depression, anxiety and distress at the beginning of the COVID-19 pandemic among adults from Germany. *Psychiatry Res.* 2020;293:113462.
2. Rice SM, Graber E, Kourosh AS. A pandemic of dysmorphia: "Zooming" into the perception of our appearance. *Facial Plast Surg Aesthet Med.* 2020;22:401–402.
3. Crerand CE, Franklin ME, Sarwer DB. MOC-PS(SM) CME article: Patient safety: Body dysmorphic disorder and cosmetic surgery. *Plast Reconstr Surg.* 2008;122(4S):1-15.
4. American Academy of Facial Plastic and Reconstructive Surgery. Thomas Kugler, ISG Solutions, American Academy of Facial Plastic & Reconstructive Surgery. https://www.aafprs.org/Media/Press_Releases/ZOOM%20Causes%20Spike%20in%20Aesthetic%20Requests%20Oct%2026'20.aspx. Accessed November 22, 2020.
5. Ward B, Ward M, Fried O, Paskhover B. Nasal distortion in short-distance photographs: The selfie effect. *JAMA Facial Plast Surg.* 2018;20:333–335.

Opportunity after a Perfect Storm

As we collectively experience this viral scourge, I (L.K.R.) am reminded of a famous Dickens quote: "It was the best of times, it was the worst of times ... it was the season of light, it was the season of darkness...."[1]

He could have written this quote yesterday. It may seem like the worst of times, but it can sometimes also offer the best of times, with unexpected bright moments in the life of our practices. To whit, the recent convergence of two of my ongoing passions—perfecting the video recording of my surgeries and improving resident aesthetic surgery education.[2] There came to pass a kind of perfect storm, marrying these same endeavors: the coronavirus disease of 2019 (COVID-19) social distancing, my video recording working model, the necessity for ongoing resident education, and our global adoption of the Zoom video conferencing platform (Zoom Video Communications, Inc., San Jose, Calif.).

So, I donned my headlamp with a Pixel 4 cell phone (Google, LLC, Mountain View, Calif.) affixed and conducted a successful interactive live-surgery session with my co-author, Roger Cason, a Duke University Medical Center senior resident. [**See Video 1 (online)**, which demonstrates an interactive live-surgery teaching session between the authors.] After a PubMed search, it surprised me to find only one article describing a similarly transmitted didactic meeting during COVID-19.[3]

What have we learned from this "experiment"?

1. The Zoom-like platform can successfully facilitate an authentic, high-definition, live-surgery session—from the *surgeon's point of view*—approximating the in-person, observer experience.
2. This video conferencing app may be invoked easily, promising future surgical sessions *at any time, from anywhere.* When recorded, the sessions can be posted and on-demand online.
3. This set-up, as the toy boxes used to say, "may require some assembly," but it proves the concept of donning a cell phone for operative video.

Figure 1 illustrates the headlamp fitted with the cell phone within a three-dimensionally printed holster affixed with extension arms. Note the photography diffusion paper in place to approximate the softer, wider field of a video camera lamp. A counterweight hangs posteriorly, effectively negating the added weight anteriorly, allowing for hours of video. Using this high-end cell phone allows for the highest quality compact video on the market (4K with advanced image stabilization and zoom), a full day of battery life (with a battery pack in place), a large internal memory [128-GB Pixel phone and 256-GB iPhone (Apple, Inc., Cupertino, Calif.)], video streaming (Chromecast by Google or iPhone's AirPlay by Apple) to a monitor, and automatic cloud video backup. [**See Video 2 (online)**, which shows a Pixel Phone 4K video sample and demonstrates the impressive video quality of the mounted cell phone's camera.] Their most compelling feature is the relentless incremental improvements, in weight and quality, as compared with every other camera on the market.

The costs of my assembly (i.e., cell phone and holster) is less than $1500 and dwarfed by all the turnkey systems on the market, which still do not offer all the integrated benefits and photographic quality, in one compact unit. Most critically, *only* these cell phones allow for seamless Zoom-like live-streaming.

I would encourage the adoption of this powerful and practical strategy for ongoing resident education during this time of COVID-19. Even after the cloud has

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