**QS1**

Can You Trust What You Watch? An Assessment of the Quality of Information About Aesthetic Surgery on YouTube

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**PURPOSE:** The internet has become the primary source for patients seeking information on aesthetic surgery. YouTube is a popular website for this purpose with billions of views daily. Videos can be posted without regulation or standardization, which has the potential to lead to misinformation. Currently, there are no objective assessments of the quality of information on YouTube about aesthetic surgery, which the authors aim to address with this study.

**METHODS:** The 12 most common aesthetic surgical procedures were identified from the 2015 ASPS procedural statistics and 21 lay person and technical procedure terms were used as individual search terms in YouTube. Based on upward trends, buttock lift was also included. The top 25 most relevant results for each search term between May 25 and June 8, 2016 were identified and scored by 3 independent reviewers using a modified version of Ensuring Quality Information for Patients (EQIP) criteria based on video structure, content and author identification. Average EQIP score, view count, and video duration were compared among authorship groups (physician, patient or other entity).

**RESULTS:** A total of 523 videos were graded using the modified EQIP criteria after duplicates were excluded. The mean modified EQIP score for all videos was 13.1 (SE = 0.18) out of a possible 26 total points. The videos found under the search “nose reshaping” had the lowest mean score of 10.24 (SE = 0.74), while “breast augmentation” had the highest score of 15.96 (SE = 0.65). Physician authorship accounted for 59% of included videos and were found to have a higher mean EQIP score and total video views than those posted by patients. Whether the search term used was the appropriate medical terminology for the procedure or a non-expert description, such as “otoplasty” versus “ear surgery,” influenced how many of the top 50 videos were relevant to plastic surgery and the average EQIP score. Only 3 of the 21 total search terms had a mean modified EQIP score in the 75th percentile that met criteria for high quality videos.

**CONCLUSION:** The information available to patients from YouTube videos related to common aesthetic surgical procedures is of low quality. Patients should be aware that the information in existing videos has the potential to be inaccurate. The modified EQIP criteria presented offers a set of objective criteria to evaluate the quality of these videos. Plastic surgeons and organizations such as the ASPS should be encouraged to develop high quality videos to educate patients and make these videos accessible.

**QS2**

Influence of Race, Income, Insurance and Education in Rate of Breast Reconstruction: an NCDB 2004–15 Analysis

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**PURPOSE:** The United States has 3.5 million breast cancer survivors. Breast reconstructive procedures are an important source of hope for those who want to recover their self-esteem and quality of life. We hypothesize that socioeconomic disparities such as race, income, insurance coverage and education can affect breast reconstruction rates. The aim of this study is to identify disparities in breast reconstruction and make this information available for the development of future public strategies to reduce disparities.

**METHODS:** We queried the National Cancer Database (NCDB) from 2004–2015 in a retrospective cohort analysis. We included females, older than 18 years of age, with diagnosis of invasive breast cancer or ductal carcinoma in situ that underwent mastectomy. The exclusion criteria that we used were: males, benign breast disease, no surgical procedure, less than 18 years of age. 189,213 patients met the criteria and were included for analysis. This population
was then classified by demographic characteristics such as race, ethnicity, income, insurance and education level. The rate of no reconstruction frequencies against any reconstruction was evaluated for disparities.

RESULTS: There was a lower rate of no breast reconstruction among White race (110102/158723, 69.4%) as compared to African American (15514/20734, 74.8%), Native American (461/548, 84.1%) and Asian (4747/6380, 74.4%) (p<0.001). There was a lower rate of no breast reconstruction for patients with an income ≥$46K or $63K (78141/101823, 76.7%) than in patients with an income <$46K or $63K (50324/81166, 62.0%) (p<0.001). The rate of no breast reconstruction in patients with private insurance (56665/99165, 57.1%) was lower when compared to those with government insurance (70733/82508, 85.7%) and patients with no insurance (3341/4001, 83.5%) (p<0.001). There was a lower rate of no reconstruction among patients that reside in zip codes in which <14% of the population did not graduate from high school (45823/72589, 63.1%) compared to: patients that reside in zip codes in which 14%-19.9% did not graduate from high school (30532/42537, 71.8%), patients that reside within a zip code area in which 20%-28.9% of the population did not graduate from high school (30233/40075, 75.4%) and patients that reside within a zip code area in which 29%+ of the population did not graduate from high school (21865/27769, 78.7%) (p<0.001).

CONCLUSION: Differences in reconstructive rates exist based on race, income, insurance and education level. Further studies need to be conducted in order to identify and mitigate the causes of disparities to this procedure.

QS3

The Use Of Non-invasive Devices To Objectively Measure Changes In Human Facial Skin After Facial Rejuvenation Treatment

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PURPOSE: Non-invasive assessment devices providing objective data regarding various parameters of the skin have been largely available, but its use in clinical studies have been limited. The purpose of this study is to measure facial skin before and after treatment with a 1470-nm/2940-nm laser to determine if non-invasive, objective skin assessment devices can accurately and reliably measure changes in skin texture, tone, water loss, pigmentation, and wrinkles.

METHODS: Twelve patients were enrolled in the study and all patients underwent treatment with a 1470nm/2940nm laser for facial rejuvenation. Prior to treatment, standard and close-up photographs, VISIA images, and 3D images were taken. Non-invasive skin measurements were taken with high resolution ultrasonography, optical coherence tomography (OCT), transepidermal water loss (TEWL), and BTC 2000. The photos and measurements were repeated at follow up on Week 3 and 3 months. All data points were aggregated and analyzed as an average change compared to baseline values.

RESULTS: Our results showed the non-invasive skin assessment devices were able to detect significant changes after treatment in a variety of parameters. Significant improvement was seen in UV spots using the VISIA at 3 weeks and 3 months (p<0.05) and brown spots at 3 months (p <0.05). Using the BTC 2000, our devices were able to detect a statistically significant improvement in elasticity (p<0.05). Attenuation coefficient decreased significantly at 3 weeks (p<0.05) and lastly, blood flow at 0.6mm depth increased significant at 3 weeks (p<0.05).

CONCLUSION: Our pilot study has shown that several non-invasive devices can be used to detect changes in facial skin following an office-based laser treatment. These non-invasive skin assessment devices are able to detect significant changes in skin structure and pigmentation. The VISIA, BTC 2000, OCT, and Dub SkinScanner are useful tools in providing objective measurements and analyzing changes before and after skin rejuvenation treatments.

QS4

Outcomes in Breast Reconstruction: Does Race Play a Role? An Analysis of 51,362 Patients from the ACS-NSQIP

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