METHOD: Retrospective review of all Yale Melanoma Registry Database patients with positive margins after excision between January 2011 and December 2021 was conducted. Patients were included if they had cutaneous melanoma treated with excision and excluded if they did not have positive margins or presented with mucosal or uveal melanoma. Demographics, type of reconstructive technique, management of positive margins, operative time, surgical margins, and complications were all recorded.

RESULTS: 4620 WLEs were performed with 235 cases having involved margins (0.8%). Of these, 119 patients met our inclusion criteria. Sixty-six percent of patients were male with an average age of 69 years. Fifty-Five patients were diagnosed with melanoma in-situ and 64 with invasive melanoma at the time of primary excision. All patients underwent excision with an oncoplastic surgeon with either immediate (117 patients) or delayed (2 patients) reconstruction. 84 patients had melanoma on their head or neck, 16 patients on their upper extremity, 12 patients on their lower extremity, and 7 patients on their torso. The most common location was the head and neck (70.6%). 21 patients had their operative site closed via primary closure, 10 patients received full-thickness skin grafts, 70 were closed with a local flap, 16 received a pedicle flap, and 2 received a combination of a local flap and a full-thickness skin graft. All patients with invasive melanoma at the margin underwent re-excision, but patients with only single cell changes of MIS were also offered Imiquimod as a possible treatment. Seventy-one subjects (59%), underwent re-excision. Repeat excision required only minor procedures with smaller defects and more frequent use of primary closure or readvancement of a previously placed flap, as opposed to a new reconstruction. The maximum number of excisions needed to attain negative margins was three and only 6 (5%) patients required this many procedures. Of the 41 patients managed with Imiquimod, 48% (17 patients) were successfully treated and had negative scouting biopsies after treatment thus avoiding re-excisions. Cases with unsuccessful treatment were managed with additional cycles of Imiquimod, re-excision, or close follow-up. Complications were experienced by 5% of patients including 2 superficial infections, 1 dehiscence, 1 adverse reaction to Imiquimod, 1 flap compromise, 1 postoperative bleeding, and 1 recurrence after successful Imiquimod treatment. Our data demonstrates immediate reconstruction is safe, even in the head and neck region where wider margins are often sacrificed for more favorable cosmetic outcomes.

CONCLUSION: Primary excision of melanoma with immediate reconstruction is safe and eliminates the time a patient would have an open wound while waiting for margin clearance. Further study of the cost savings produced by immediate reconstruction is underway.

TRACK: RESEARCH/TECHNOLOGY
PAPER
Evaluating the Quality and Reliability of Gender-affirming Surgery Videos on YouTube and TikTok

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PURPOSE: Social media platforms have changed the way medical information is disseminated. Prospective transgender patients, especially those with limited access to healthcare, may utilize social media to learn about gender affirming surgeries (GAS). Although videos on social media are readily accessible, their content is not verified or peer reviewed. Previous literature has examined the quality of gender affirming chest surgery, but not of gender affirming genital surgery. Therefore, this study aims to evaluate the quality and reliability of YouTube and TikTok videos related to gender affirming chest and genital surgery.

METHOD: YouTube and TikTok were queried for masculinizing top surgery, metoidioplasty, phalloplasty, breast augmentation, and vaginoplasty. Quality of video content was analyzed by the DISCERN scale. Quality scores were compared amongst the type of GAS, account user, and content category.

RESULTS: There were 275 YouTube videos and 55 TikTok videos, with the majority focused on masculinizing top surgery (p<0.001). The majority of YouTube videos were produced by patients (67.6%). Healthcare professionals and centers produced 23.6% of YouTube videos. Plastic surgeons created 71.9% of all YouTube videos produced by MDs. Overall, YouTube videos had higher quality and reliability than TikTok videos (p=0.003). Overall, videos on masculinizing GAS had higher quality and reliability than videos on feminizing GAS (p<0.001). Chest surgery videos were of higher quality than those on genital surgery (p ≤0.001). Videos on masculinizing top surgery had the highest quality while vaginoplasty had the lowest quality and
reliability (p<0.001). Videos produced by healthcare professionals and academic institutions had the greatest quality and reliability, respectively (p<0.0001), whereas videos produced by patients were the least reliable (p<0.0001).

CONCLUSION: Healthcare professionals, especially plastic surgeons, should create high quality and reliable videos on social media. These videos will educate transgender patients with unique health needs, especially for patients interested in breast augmentation and genital surgery. When done correctly, content on social media can improve patient knowledge, promote evidence-based medicine, and ease patient anxiety in real time.

REFERENCES:
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TRACK: AESTHETIC
Evaluation of the Effects of Incisional Negative Pressure Wound Therapy on Complications after Abdominal Body Contouring Procedures

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PURPOSE: There is a wealth of basic science and clinical data supporting incisional negative pressure wound therapy’s (iNPWT) healing capabilities. Literature supports the use of iNPWT on closed surgical incisions in orthopedic, cardiothoracic, neurosurgical and plastic surgery procedures. Plastic surgery journals have shown a decrease in wound healing complications with the use of iNPWT in reduction mammoplasty and breast reconstruction; however, literature on the effects of iNPWT in body contouring is lacking. We sought to determine the effects of iNPWT on surgical complications in patients undergoing abdominal body contouring procedures. We hypothesized that complication rates in patients whom had an iNPWT device placed post-operatively would be decreased in comparison to a matched patient population without iNPWT device placement.

METHOD: We performed a retrospective, cohort study of patients whom had an abdominal body contouring procedure at a large, academic healthcare system from December 2015 to December 2020. All panniculectomies and abdominoplasties were performed by one of three board-certified plastic surgeons. Complications consisted of wound dehiscence, seroma, hematoma, infection and superficial skin breakdown. Wound dehiscence was defined as measurable soft tissue breakdown with exposure of the deeper subcutaneous tissue. Infection was defined as clinical signs concerning for infection with initiation of antibiotics within 90 days of surgery. Superficial skin breakdown consisted of skin epidermolysis requiring minimal, local wound care.

RESULTS: A total of 341 patients had an abdominal body contouring procedure performed over the five year period. More than half of these patients (54.6%) were status post bariatric surgery. Forty percent of patients had an iNPWT device placed post-operatively. Mean Body Mass Index (BMI) was 32.7 (range 20.7-67.3). Patients with lower BMI (31.5 vs. 33.6, p = 0.0154) and a history of mild liver disease (26.3% vs. 14.7%, p = 0.008) were more likely to have had an iNPWT device placed. There was a lower rate of wound dehiscence (2.9% vs. 9.8%, p = 0.0148) among the iNPWT patients. Patients with an iNPWT device were significantly less likely to have had signs of infection warranting antibiotics within 90 days of surgery (7.3% vs. 23%, p = 0.0001). Hematoma and seroma rates in the iNPWT group were 3.6% and 8.0% versus 4.4% and 11.8%, respectively, in the group without iNPWT. Fifty-three percent of iNPWT patients, and 50% of patients without iNPWT, had superficial skin breakdown requiring local wound care. None of the hematoma, seroma or superficial skin breakdown differences reached statistical significance.

CONCLUSION: Our results show that the risk of wound dehiscence was significantly decreased with the use of an iNPWT device. In addition, iNPWT was associated with less wound infections as that cohort subsequently required fewer antibiotic prescriptions within 90 days of surgery. The rates of seroma and hematoma in the iNPWT group were decreased, however, did not reach statistical significance. Our analysis shows that iNPWT devices placed on body contouring incisions post-operatively decreases wound dehiscence and surgical site infections, especially in the high-risk, obese patient population.