“Useful” videos accounted for 9.7% of views, whilst misleading views accounted for 3.8%.

“Personal accounts” made up 24.8% of videos and 86.6% of views. Videos by plastic surgeons in private practice (21.7%) offered the best overall quality. There was a significant difference between video quality and video duration (p=<0.05), but no significant difference between video quality and number of views (p=>0.05).

CONCLUSION: YouTube hosts a wealth of information relating to breast reconstruction following mastectomy. Videos of personal experiences have highest viewership and may influence patient health behaviours more than content offered by healthcare professionals.

There is arguably a need for high equality, educational videos that are more appealing to general viewers.

REFERENCES:
1. Vance K, Howe W, Dellavalle RP. Social Internet Sites as a Source of Public Health Information. Dermatol Clin. 2009; 27:133–6.

An in-Depth Look at Fat Necrosis

Yee Onn Kok, MBBS, MRCS; Janna Joethy, MRCS, FAMS; Issam Al Jajeh, MD, FAMS; Khong Yik Chew, MRCS, FAMS; Kok Chai Tan, MBBS, FRCS, FAMS; Chee Liam Foo, FRCS, FAMS

PURPOSE: Fat necrosis and foreign body reaction are challenging dilemmas post breast fat grafting. The minimally invasive microdebrider can be used for fat necrosis removal. Improper handling of fat grafting leading to foreign debris with fat necrosis is highlighted as well.

METHODS: A 27-year-old female underwent bilateral breast fat grafting (abroad) in a foreign centre which produced symptomatic palpable lumps. A 3 year post procedure MRI showed bilateral discrete fat necrosis and oil capsular lumps 1 largest being 3 by 5 cm. She underwent debridement of bilateral fat necrosis using a microdebrider (Medtronic). Histology confirmed fat necrosis with reactive chronic inflammation and foreign debris with xanthogranulomatous reaction. This was unusual because foreign material is typically not present during fat injection. Post operatively, despite having reduced in size, the patient wanted complete removal and she subsequently agreed for open excision.

DISCUSSION: Fat necrosis is a benign nonsuppurative inflammatory process of adipose tissue. Typical MRI features are that of lipid cysts with hypointense T1 signals. The microdebrider is a powered, rotary shaving device with continuous suction that is well established for use in functional endoscopic sinus surgery (FESS) for excision of nasal polyps. We have previously reported its use in gynecomastia and accessory breast removal. The only scar is a 3mm port site in the ipsilateral anterior axillary line. Literature on microdebrider fat removal is limited and we share our experience in this case report. We also illustrate the presentation of fat necrosis histologically from specimens obtained from both the microdebrider and the open excision.

CONCLUSION: Microdebridement of fat necrosis can be considered in the surgical armamentarium even for bigger lumps up to 5cm. We show the images of fat necrosis and we discuss our management. Careful harvest and grafting of fat to avoid foreign debris related granulomas is re-emphasised.

Anatomical Variation of Zygomatic Nerve Branches Around Zygomaticus Major Muscle in Facelift

Min-Hee Ryu, MD; David K. Kahng, MD; Jonathan Amer Zelken, MD

INTRODUCTION: To improve the mid-facial soft tissue sagging, it is sometimes necessary to release the zygomatic and upper masseteric retaining ligaments in the sub-SMAS plane. Release of these ligaments needs to be done carefully to avoid any injuries to the branches of the facial nerve. Some of the zygomatic branches run towards the Zygomaticus major muscle are located deep to the fascia and passes deep under the third of the Zygomaticus major muscle. However, anatomical variation of the zygomatic branches were found. This is a case of the anatomic variation of the zygomatic branches seen unilaterally in a single patient undergoing facelift.

MATERIALS AND METHODS: A healthy 66-year-old female patient underwent a facelift procedure.

RESULTS: After the zygomatic and upper masseteric retaining ligaments were released in the sub-SMAS plane, an anatomical variation of the zygomatic branches were identified lateral to the origin of the Zygomaticus major muscle on the left side only. The branches penetrated from the
deep fascia about 1 cm lateral to the origin of the zygomaticus major muscle; one ramus passed superficially above the upper third of the muscle. On the right side, this was not seen. The main zygomatic retaining ligaments are located immediately lateral to the origin of the zygomaticus major muscle. The zygomatic branches are usually located deep to the deep fascia in the lateral area of the muscle and passes deep under the third of the muscle. Therefore, the branches are protected while the retaining ligaments are dissected in the sub-SMAS plane. However, in this patient, the risk of the zygomatic branch injury is higher so blunt dissection, adequate vertical traction of the SMAS flap, and the use of tumescent solution are needed to visually differentiate between the retaining ligaments and the nerve branches to avoid any injury.3

CONCLUSION: we should be aware of this unique case where the variation was only seen unilaterally. Particular care must be taken when dissection is performed to release the retaining ligaments. We hope this case can contribute to avoid nerve injuries in facelift procedures.

DISCLOSURE/FINANCIAL SUPPORT: None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.

REFERENCES:
1. Alghoul M, Bitik O, McBride J, Zins JE. Relationship of the Zygomatic Facial Nerve to the Retaining Ligaments of the Face: The Sub-SMAS Danger Zone. Plast Reconstr Surg. 2013;131:245e.
2. Mendelson BC, Muzaffar AR, Adams WP Jr. Surgical Anatomy of the Midcheek and Malar Mounds. Plast Reconstr Surg. 2002;110:885–896; discussion 897–911.
3. Ryu MH, Moon VA. High Superficial Musculoaponeurotic System Facelift with Finger-assisted Facial Spaces Dissection for Asian patients. Aesthet Surg J. 2015;35;1–8.

Assessing the Value of Autologous Fat Grafting: A Focused Review of the Safety, Effectiveness, and the Efficiency Among Reconstructive and Cosmetic Applications

Scott Spear, MD; Courtney Coles, MPH; Braden Leung, PhD; Matthew Gitlin, PharmD; Mousam Parekh, MS; David Macarios, MBA

INTRODUCTION: In 2014, 21.4 million cosmetic and reconstructive autologous fat grafting (AFG) procedures were performed.1 While there may be increasing evidence suggesting the safety and effectiveness of AFG in breast-related procedures, little is known regarding the efficiency of such procedures. This study summarizes the literature assessing these outcomes, with a focus on efficiency.

METHODS: A systematic literature review of fat grafting procedures using PubMed from April 1, 2010 to April 30, 2015 was conducted assessing safety, effectiveness and efficiency outcomes of AFG procedures. Patient demographics, surgical characteristics, and outcomes related to safety, effectiveness, and efficiency were evaluated. Descriptive statistics including mean, median, ranges and percentages were derived from these studies.

RESULTS: A total of 598 articles were assessed. Sixty-five studies were included: 36 for breast applications (BA), 20 for facial applications (FA), and 9 for other applications (OA) (buttocks/arms/hands). Safety (i.e., fat necrosis, infection) and effectiveness (i.e., fat retention, satisfaction) outcomes were found to be similar to prior reviews as well as across other applications. Although no studies reported the mean volume of fat processed, multiple studies reported the mean volume of fat harvested: BA, 503 ml (range: 12–1,299); FA, 152.7 ml (range: 35–360), and OA 1753.8 ml, which was specific to the buttocks. Most BA studies reported the mean volume of fat re-injected (mean across studies = 145 mL; range: 20–607). Mean OR time was 125 min (range: 40–210) for BA; sufficient OR data was not available for FA and OA.

CONCLUSIONS: This review validated previous findings on the safety and effectiveness of AFG, highlighted new efficiency data, and identified gaps and variability in how efficiency was evaluated. The limited published data helps to frame the challenge and need for the ASPS effort to collect and standardize data by using the GRAFT registry. Additionally, when combined with more recent literature communicating efficiency as a rate (cc/min), uniformity of reporting across the harvesting, processing, and injection steps of AFG is encouraged in order to allow for comparisons across studies and among new technologies that may have the potential to reduce time and thus produce cost-savings while not sacrificing safety and effectiveness.

REFERENCES:
1. 2014 Plastic Surgery Statistics Report. American Society of Plastic Surgery. 2014