Patients were also requested to evaluate their aesthetic results in a 5-scale climax (poor, fair, good, very good, excellent).

**RESULTS:** Reduced waist circumference was recorded in all patients.

Group I had a mean reduction of W.C. of 5cm (2cm to 12cm)

(185 patients),

Group II had a mean reduction of W.C. of 8.5cm (5-17cm)

(20 patients) and

Group III had a mean reduction of W.C. of 11cm (9-21cm)

(3 patients)

75% of the patients marked their results as excellent, 15% as very good and 10% good.

**CONCLUSION:** It has been documented that men and women with large waist circumference have lower life expectancy. We describe an abdominoplasty technique which can specifically reduce waist circumference and could offer them important health benefits and probably lower mortality rates.

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**Buccal Fat Pad Excision: Proceed with Caution**

**Presenter:** Martin Benjamin, MD  
**Co-Author:** Richard Reish, MD, FACS  
**Affiliation:** Nassau University Medical Center / Long Island Plastic Surgical Group, PC, Garden City, NY

**PURPOSE:** Buccal fat pad excision is often offered by many practitioners as a means of obtaining a more aesthetic or congruent midface. This procedure is often performed by non-board certified physicians and has been documented in the form of countless videos on Instagram and other social media platforms with no long term patient follow-up. We performed a retrospective analysis of published data regarding buccal fat pad excision and sought to better elucidate pitfalls regard this underreported plastics procedure in the literature.

**METHODS:** A literature search was conducted in October 2017 through the PUBMED database for articles regarding the utility of buccal fat pad excision in the setting of aesthetic improvement of the midface. Reference articles were screened manually to obtain relevant studies. A total of 121 citations were identified in the original search but after eliminating duplicate studies and abstracts and utilizing predefined inclusion/exclusion criteria only 11 articles were satisfactory.1-5 None of these articles demonstrated any long-term patient follow-up.

**RESULTS:** Out of the 121 relevant citations identified in our search, only 2 studies published describe a case series of >5 patients regarding cheek or midface sculpturing with buccal fat pad excision for aesthetic purposes, the total sample size between these two studies was 53 patients. Neither of the two studies had long term follow up regarding patient satisfaction or related outcomes.

**CONCLUSIONS/SIGNIFICANCE:** Buccal fat pad resection as an aesthetic improvement of the midface has traditionally been described but follow up regarding loss of subcutaneous fat with aging (or cheek hollowing) and late secondary deformities have not been published in the literature. Further research in long term patient follow up postoperatively including patient satisfaction rates and the encouragement of reporting postoperative complications is warranted.

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**RESEARCH & TECHNOLOGY SESSION 1**

**Whole Eye Transplantation: Allograft Survival with Tacrolimus Immunosupression and Comparison to Syngeneic Transplantation**

**Presenter:** Wendy Chen, MD, MS  
**Co-Authors:** Jila Noori, MD; Lin He, MD; Chiaki Komatsu, MD; Maxine R. Miller, MD; Ian Rosner, BS; Wensheng Zhang, MD, PhD; Kira L. Lathrop, MAMS; Joshua M. Barnett, BS; Yong Wong, MD; Bing Li, MD; Mario G. Solari, MD; Charleen T. Chu, MD, PhD; Kia M Washington, MD
**Affiliation: University of Pittsburgh, Pittsburgh, PA**

**PURPOSE:** Visual impairment and blindness present significant economic, social and personal burdens for millions of patients and caregivers around the world. Whole eye transplantation (WET) is a potential solution. Our lab has established a viable rodent model with promising results in syngeneic transplants. To investigate allotransplantation, successful immunosuppression is necessary. Tacrolimus monotherapy is successful in rodent VCA and has possible neuroprotective effects in the central nervous system and injured optic nerve, but its efficacy in WET is unknown. Here, we present survival of allograft WET treated with Tacrolimus monotherapy.

**METHODS:** Brown-Norway to Lewis rat transplants were performed (n=6), followed by daily intraperitoneal 1mg/kg Tacrolimus injection. Animals were examined at weeks 1, 3, 5, and 6, and compared to syngeneic transplants. Structure and blood flow of the eye and retina were studied using Optical Coherence Tomography (OCT). A retina specialist ophthalmologist performed an anterior segment examination, fundoscopy, indirect ophthalmoscopy, and tonometry for intraocular pressures. Animals were sacrificed at 6 weeks. Specimens of the transplanted globe, external ear, eyelid, bone and vessel anastomoses were stained with H&E and interpreted by an ocular pathologist.

**RESULTS:** Compared to syngeneic transplants, allografts demonstrated comparable corneal thickening, retinal thinning, and blood flow in the central retinal artery and vein (OCT). Intraocular pressures were normal and comparable to syngeneic transplants. On clinical examination, both groups had mild corneal anomalies, but allografts had more frequent fundus ischemia (moderate). Histologically, both groups had global ocular chronic inflammation, some degree of retinal degeneration, but, in contrast to allografts, syngeneic transplants actually showed consistent degeneration of the optic nerve.

**CONCLUSION:** This is the first study of orthotopic allograft eye transplantation and immunosuppression. Compared to syngeneic transplants, allografts had increased ischemia, but less optic nerve degeneration, without signs of rejection. Overall preservation of ocular structures is an exciting first step. With this, we can begin to explore innumerable new questions in eye transplantation.

**Study of Retinochoroidal Circulation with Fluorescein Angiography after Whole Eye Transplantation in Rodents**

**Presenter: Chiaki Komatsu, MD**

**Co-Authors:** Jila Noori, MD; Maxine R. Miller, MD; Yong Wang, MD; Touka Banaee, MD; Bing Li, MD; Joshua M. Barnett, BS; Wendy Chen, MD, MS; Kira L. Lathrop, MAMS; Ian Rosner, BS; Wensheng Zhang, MD, PhD; Mario G. Solari, MD; Andrew W. Eller, MD; Kia M. Washington, MD

**Affiliation: University of Pittsburgh, Pittsburgh, PA**

**PURPOSE:** Approximately 39 million people worldwide are blind. Whole eye transplantation (WET) could potentially provide a viable optical system to people worldwide with irreversible vision loss. As a first step toward realizing this goal, we have developed an orthotopic model for whole eye transplantation in the rat. Given that viability of the retina is crucial to functional visual return, we evaluated the structural integrity of the retinochoroidal circulation after transplantation using fluorescein angiography (FA), which is the gold standard to evaluate retinal circulation.

**METHODS:** Brown Norway rats underwent syngeneic whole eye transplantation (n=4). At post-operative week 1, transplanted animals had ocular exams under anesthesia and wide-field FA and fundus photographs of both eyes were obtained to evaluate retinochoroidal blood flow. Ocular examinations were performed by an ophthalmologist with retina specialization to evaluate the anterior and posterior segments of the eye. We used a stereo microscope that has fluorescence imaging capability to capture fundus and fluorescein angiography images. The objective lens of the microscope is used in conjunction with a 78D Volk lens, which allows for wide-field imaging. The right eyes of 3 unoperated naïve Brown Norway rats (n=3) served as controls.

**RESULTS:** FA revealed that retinochoroidal circulation was restored in all transplanted eyes exhibiting normal choroidal background, arterial and venous filling, and no leakage from the vascular tree. These results were comparable to normal naïve eyes. In two of the transplants, retinal arteries...