



Lipo One STEP HD for Penile Girth Augmentation using Photostimulated Fat Graft

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Abstract

This case report explores the application of photostimulated fat grafting from laser-assisted liposuction for penile girth augmentation. The patient, a 25-year-old male with normal penile length, sought the procedure due to dissatisfaction with his girth. The procedure involved the use of a 1210-nm diode laser (Lipo One STEP HD, DMC Group, Brazil) to stimulate adipocytes, which were then aspirated and grafted onto the penis. The patient reported satisfaction with the results, with no adverse events noted. This report contributes to the scientific literature by detailing the potential of photostimulated laser-assisted liposuction in penile girth augmentation, highlighting its efficacy and safety. The patient's perspective underscores an improvement in self-esteem and quality of life post-procedure. This technique offers a novel approach in aesthetic surgery, demonstrating promising results in various applications.

Keywords

Photostimulated Fat Grafting, Laser-Assisted Liposuction, Penile Girth Augmentation, Adipocyte Stimulation, Aesthetic Surgery

Introduction

The field of aesthetic surgery has seen significant advancements in recent years, with the development of novel techniques aimed at improving patient satisfaction and safety. One such technique is photostimulated fat graft from laser-assisted liposuction, a procedure that has shown promising results in various applications [1]. This case report presents a unique instance of penile girth augmentation using fat graft obtained by this technique. Penile girth augmentation is a procedure sought by men who, despite having normal penile length and function, express dissatisfaction with their

girth [2]. The patient in this case, a 25-year-old male with an unremarkable medical history, presented with such concerns. His decision to proceed with the procedure was made after thorough counseling about the potential risks and benefits. Photostimulated fat graft, using laser-assisted liposuction, offers a novel approach to address these concerns [3]. The procedure involves the use of a diode laser to stimulate adipocytes, which are then suctioned out and grafted onto the penis to increase its girth. The laser also stimulates collagen production, which may contribute to the longevity of the results.

Case Report

Patient Information

The patient, a 25-year-old male, presented with concerns about his penile girth. His medical history was unremarkable, and he had no prior surgical interventions.

Clinical Findings

Physical examination revealed a normal penile length of 14 cm, but the patient expressed dissatisfaction with his 8 cm girth in the flaccid state.

Timeline

The patient underwent the photo-stimulated laser-assisted liposuction procedure in July 2023, with follow-up visits at one week and six months post-operation.

Diagnostic Assessment

The patient's concerns were primarily aesthetic, and the decision to proceed with the procedure was made after thorough counseling about the potential risks and benefits.

Therapeutic Intervention

The surgical procedure was executed under the influence of epidural anesthesia and endovenous sedation. The adipose tissue graft, utilized for augmentation, was harvested by photostimulated laser-assisted liposuction. This technique employs a diode laser with a wavelength of 1210 nm (Lipo One STEP HD, DMC Group, Brazil) to selectively photothermostimulate the subcutaneous tissue. The entire anterior abdominal wall was subjected to this process for a duration of 20 minutes. Subsequently, 1100 cc of adipose tissue was aspirated using a 4 mm blunt-tip cannula. A portion of this liquefied adipose tissue, 40 cc, was then grafted subcutaneously up to the surface of the tunica albuginea, parallel to the corpora cavernosa, preventing damage to the skin and muscles of the penis, to enhance its circumference, utilizing a 1 mm blunt-tip cannula. The procedure was carried out devoid of any complications, underscoring the safety of this technique when performed meticulously and in strict adherence to safety protocols.

Follow-up and Outcomes: The patient reported satisfaction with the results at each follow-up visit. Six months after the procedure, the penile girth was 10 cm in the flaccid state. No adverse events were noted. **Fig-1** shows the before and after.

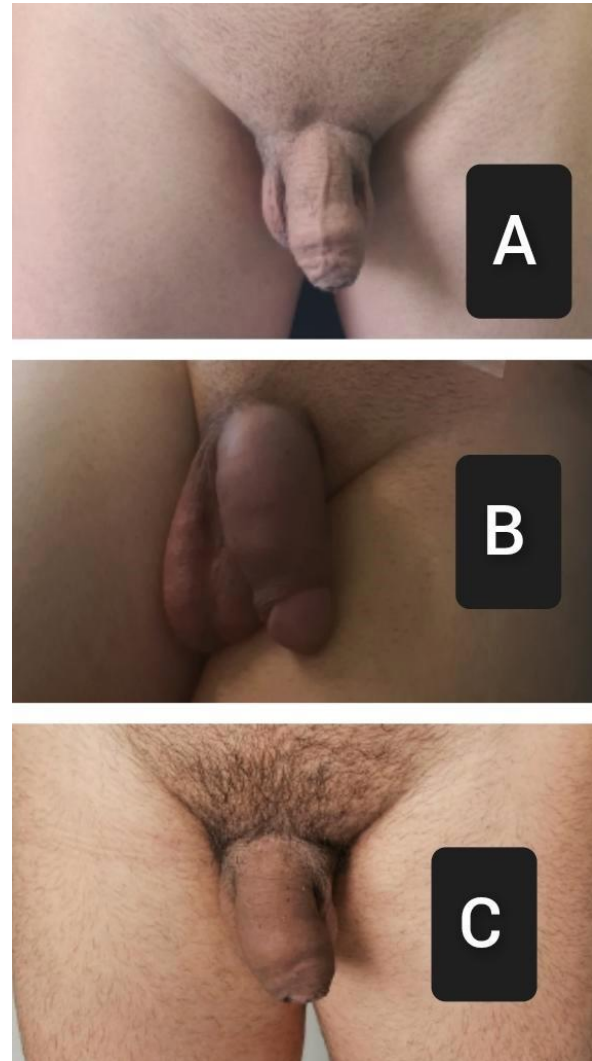


Fig-1: A- preoperative, B- transoperative, C- 6-months follow-up.

Patient Perspective

The patient expressed satisfaction with the outcome of the procedure, noting an improvement in his self-esteem and quality of life.

Discussion

The utilization of photostimulated laser-assisted liposuction for penile girth augmentation, as demonstrated in this case, is innovative. However, it is in alignment with the expanding body of literature that emphasizes the versatility of laser-assisted liposuction

techniques [3,4]. An enhancement in the survival rate of adipocytes, while concurrently stimulating collagen production, has been observed in multiple studies, underscoring the potential of this approach for a variety of aesthetic procedures [5-7]. The satisfaction of the patient with the outcome of the procedure, as observed in this case, aligns with the literature findings, reporting high satisfaction rates among patients who underwent penile augmentation using regular fat grafting [8]. This suggests that the procedure not only achieves the desired physical augmentation but also contributes positively to the psychological well-being of the patient [2,9]. However, it is crucial to note that, akin to all surgical procedures, laser-assisted liposuction and fat grafting are not devoid of risks. Complications related to laser-assisted liposuction such as burns, seromas, and dyschromias, as well as those related to genital aesthetic injection such as embolism and necrosis, although rare, have been documented in the literature [10,11].

In this case, the patient did not experience any of these complications, which may be attributed to the meticulous execution of the procedure and adherence to safety protocols. The absence of complications in this case also underscores the importance of patient selection and comprehensive preoperative assessment. Characteristics of the patient such as skin type, medical history, and expectations play a pivotal role in the success of laser-assisted procedures [12]. This case exemplifies the potential of photostimulated laser-assisted liposuction as a safe and effective method for penile girth augmentation. However, additional studies are required to validate these findings.

Conclusion

This description augments the scientific literature by detailing the application of photostimulated fat graft for penile girth augmentation. Endolaser photoestimulation prior to fat harvesting is an effective tool for fat preservation and enhancing adipocyte viability. This case report underscores the potential of photostimulated laser-assisted liposuction in penile girth augmentation, highlighting its efficacy and safety.

Informed Consent

The patient signed an informed consent.

Conflict of Interest

The authors have read and approved the final version of the manuscript. The authors have no conflicts of interest to declare.

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