Early result of meshed split-tickness skin graft in patient with paraffinoma of penis

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A B S T R A C T

We present you an early result of 38 year old man, who was operated in 2020 using meshed split-tickness skin graft (mSTSG) for paraffinoma localized to the penis and pubic area. Here we present picture of pre- and postoperativ view of the penis and describe the surgical procedure.

Introduction

It is difficult to understand the reasons that force anatomically and functionally normal men to inject himself with exogenous substances (ES) to change their appearance. From ancient times the size of the penis has been important for men. To impress their partners and increase their self-esteem, some of them are looking for a way to enlarge their genitals. Despite the terrible consequences and complications of the injection of exogenous substances, in particular mineral fats, their use continues today in order to change the appearance, especially in countries in Asia, Eastern Europe, including Bulgaria. Injection of liquid paraffin led to the so-called paraffinoma - granuloma type "foreign body", leading to a number of functional and cosmetic problems. The only effective treatment for this condition is operative.

Case presentation

A 38 years old man was admitted to the Clinic of Urology at Medical University Pleven in 2020. At 16 years ago, he was injected 30 ml. liquid paraffin in his penis. The symptoms were pain and swelling for a week. The patient had normal erectile function for the first few years. Then began frequent swelling of the genitals, which were treated with various antibiotics. Gradually began deformation of the penis, reduction in size and erectile dysfunction. Detailed physical examination showed tender, granulomatous tumor formations engaging shaft of the penis and pubic area [Fig. 1]. There was no palpable enlargement of inguinal lymph nodes and no other pathological finding of the external genitalia or anywhere else in the body. The patient was shaved from the umbilicus to the knees. Under spinal anesthesia, we removed completely the skin and subcutaneous tissue infiltrated by the foreign material. We used mSTSG for method of resurfacing. Graft thickness was 0.015 inches and meshing were performed in a 1.5:1 ratio. Meshed slits were oriented transversely. The donor site for autograft take was the anterior surface of the right thigh. The width of the graft is 10 cm and the length is the circumference of the penis at the base. We use chlorhexidine acetate tulle gras dressing. On the next day the patient was discharged. Penile immobilization and catheter were removed on the fifth day. There were no complications. The follow-up examinations were on the 14th [Fig. 2] and 21st day [Fig. 3]. The patient had no complaints and reported a normal erection.

Discussion

The most common motive associated with foreign artificial bodies on the penis is sexual or erotic in nature and that is to enhance the pleasure of female or male sexual partners during sexual intercourse. The phenomenon of inserting self-made artificial nodules beneath the skin of the penis was first described in the Kama Sutra\textsuperscript{1}.

To impress their partners and increase their self-esteem, some of them are looking for a way to enlarge their genitals. Sacred Sadhu men from India and the Cholomec tribe in Peru use weights to lengthen their penises, and the Dayak tribe in Borneo drills holes through which they place ornaments to satisfy their partners. In the 16th century, Topinama men enlarged their genitals by being bitten by venemous snakes\textsuperscript{2}.

As early as 1909, Heidingsfeld described the disfiguring subcutaneous nodules that form after the application of paraffin to correct facial
wrinkles. After injection of the ES, there is initially pain, redness and swelling at the site of infiltration, which lasts from several days to a week. Complaints worsen and persist if the affected tissues become infected. Later, a chronic granulomatous reaction begins, which progresses slowly and causes complications that lead to medical attention. The latency can be between 8 months and 3.5 years. Black used mSTSG for plastic reconstruction of the skin of the penis in 9 patients after various pathologies: Fournier’s disease, chronic lymphedema, Crohn’s disease and previous unsuccessful operations. An excellent cosmetic and functional result was achieved in 8 of them, and 100% graft survival. The thickness of the graft is between 0.012 and 0.016 inches by 1:1 perforations oriented transversely. A zigzag suture is used on the ventral surface of the penis, which, according to the authors, protects against contraction. Immobilization and compression bandage are used for 3–5 days. We used a similar technique and achieved very good initial aesthetic and functional results.

**Conclusion**

Surgical technique of mSTSG for paraffinoma penis afford excellence early results.

**Declaration of competing interest**

The authors declare that they have no competing interests.

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