

Penile Siliconoma: Complication of Unregulated Penile Augmentation with Foreign Material

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Abstract Background: Injection of foreign materials and chemicals to augment the penis for sexual satisfaction is trendy phenomenon in certain countries. However the complications are disastrous and the corrective surgery could be challenging. **Case report:** A 50 years old man who had silicone injection for penile augmentation in an unregulated and non sterile environment 4 years ago, started to develop inflammatory and fibrotic complications on the penile skin. It causes stricture bands around the penile circumference and difficulty attaining full erection which causes him discomfort. The patient underwent scar excision with penile resurfacing using full thickness skin grafting with better outcome. **Conclusions:** Injecting foreign materials for the practice of penile augmentation and injecting in an sterile condition is a harmful practice

Keywords Penile Siliconoma, Foreign Material, Penile Augmentation

1. Introduction

The obsession for a larger penis and its close relation to a person's ego and attention to self image affects a lot of man around the world. In modern society, many advance penile augmentation methods are available in medical centers by trained medical professionals. However this involves screening, examination followed by counseling so as patients with normal penile size and function are discouraged from undergoing such procedures in view of potential complications. This leads to many seeking alternative treatments from unregulated practices often by nonmedical practitioners performing procedures in non-sterile environment by injecting foreign substances into the penile skin to increase its size. Materials like Paraffin, silicone, mineral oils, collagen are being widely used to help increase the penile size however many ends up develop serious reactions to these substances and its complications [1].

Sclerosing Lipogranuloma is an uncommon condition of the male genitalia presenting as a firm, tender subcutaneous mass formed by either presence of an exogenous or endogenous lipomatous substances around it. The common exogenous lipid degeneration is caused by the injection of foreign materials into the subcutaneous tissue seen in penile augmentation causing inflammatory granuloma to form

which present as a hard subcutaneous mass [1].

2. Case Report

A 50 years old gentleman, an operator on a ship with underlying diabetes mellitus was referred to Hospital Universiti Sains Malaysia, with complains of painful and thickened skin along the shaft of his penis. It started with a series of subcutaneous injection of collagen/silicone substance below the skin of his penis 4 years earlier by a non medical practitioner of achieving a larger penis to enhance his sexual performance. Patient underwent a total of 3 injections, with an interval of 1-2 weeks in between each session, unsure of the exact product or amount used. There was initially a noticeable soft irregular buldge along the shaft of the penis which increases the width of the shaft. There was no complains at the beginning till about 2 years later, when he notices recurrent painful inflammatory changes over his penile skin which later forms a thickened deformed penis with discoloration of the skin. There was no abscess or discharge from the skin, and he did not seek treatment or self medication. Patient was able to continue having sexual intercourse when the pain subsides. Few months later patient was unable to achieve his normal penile length on full erection.

On examination, he has a circumcised penis with an irregularly thickened hard skin involving circumferentially the whole shaft of the penis from the corona of the glans extending till the base of the penis. There are areas skin color changes along the hardened skin but no signs of acute

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inflammation, discharge or ulcers. The glan penis, scrotal skin and testis appear normal. Laboratory findings including Full Blood Count, Urine analysis, Blood Biochemistry were all within normal limits, even blood glucose level as well.

The patient was counseled and offered surgical excision of the fibrotic tissue with skin grafting. Later during surgery, it is found that the fibrotic tissue involves both the skin and subcutaneous tissue layer along the shaft from corona till the base of the penis and separating the skin from the subcutaneous layer was not possible due to dense fibrosis. Careful di-section of the thickened tissue done circumferentially deep down till the Bucks fasciade gloving the skin from the penile shaft. The corpus cavernosum and urethra appears normal. A Full Thickness Skin Graft was harvested from the groin region to cover over the degloved area and anchored using catgut 5/0 suture in a spiraling technique followed by bactigras dressing.

Post surgery, patient was prophylactic IV augmentin for 3 days. Inspection of the graft on 5th day shows good graft take with no haematoma or swelling and discharged. A review later at 2 weeks shows an almost complete healing at the penile shaft graft and a subsequent follow up at 6 weeks shows a completely healed graft with mild hypertrophic scarring with no recurrent lesions. Patient was able to achieve full penile length on erection and resume normal sexual intercourse.

3. Discussion

Injectable biomaterials have been used for a long time in soft tissue contouring procedures in many parts of the human body. Among these, the most commonly used are paraffin, silicone and collagen. Earlier Literatures have shown paraffin injections to cause severe reactions and it is no longer in use clinically in fact banned in many countries. The result from the use of silicone depends very much on the degree of purity of the substance hence high grade medical silicone have shown good success whereas lower grade industrial silicone materials leads to higher complications [2]. Medical grade collagen are widely use today in reconstructive and cosmetic surgery as fillers with few known complications reported. However, the availability of these medical grade substance are expensive and limited. This has cause the wide use of dubious substances by nonmedical practitioners often resulting in scarring, deformity and ulcerations.

A comparison with another recent report of patients developing similar complications after injection of foreign substance/silicone into the penile skin in Malaysia shows that there's a latent period of about 4-5 years after the injection before the subcutaneous masses starts showing causing thickening of the skin with fibrotic complications.[3]

Options for treatment depends on the severity and ranges from corticosteroid injections, antibiotics to surgical excision. [4] Surgical excision of the scar tissue including

injected foreign material followed by penile resurfacing giving the best result with minimal recurrence. Different surgical techniques for resurfacing the shaft by the use of Flaps, split or full thickness skin grafts have all been reported with satisfactory results. By taking into consideration the cosmetic appearance, tissue bulk, and risk of graft contracture, Full thickness skin graft may be the best option for current patient.

The techniques of using a single sheet of full thickness skin graft and spiraling around the penie shaft have been reported with good outcome and less scarring. It is mentioned to be technically easier to perform with the only disadvantage to be the risk of hypertrophic scar line spiraling around the body of penis. [5] Proper surgical excision of the scar tissue with full thickness skin grafting has a low recurrence and best outcome. The patient from our case report has no post surgical urinary complications and is able to achieve full penile length on full erection and back resuming normal sexual intercourse.



Figure 1. Showed the silicon injection site, hard thickened fibrotic tissue forming a band like siliconoma, constricting the of the penile corona and preventing erection and causing pain

4. Conclusions

Injecting foreign materials for the practice of penile augmentation and injecting in an sterile condition is a harmful practice. Public and individuals promoting and performing this procedure should be warned against its harmful effect.

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