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Case Series

Penile Paraffinoma: A Rare Urological Presentation – A Case Series and Literature Review

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Abstract

Penile paraffinoma is a rare chronic granulomatous inflammatory reaction resulting from the injection of paraffin or mineral oil into the penis for cosmetic enlargement. Although the practice has largely been abandoned in modern medicine, it continues to occur in certain regions, with patients often presenting years or decades after the initial procedure.

We report two cases of penile paraffinoma managed at Bedfordshire Hospitals NHS Foundation Trust, United Kingdom. The first patient presented nearly three decades after paraffin injection with chronic penile ulceration and was referred with suspected Fournier's gangrene. He underwent emergency surgical excision, and histopathological examination confirmed paraffinoma. The second patient presented with recurrent penile swelling and erythema five years after paraffin injection but declined definitive surgical treatment despite counselling. These cases demonstrate the diverse clinical presentation, prolonged disease course and challenges associated with delayed presentation and patient acceptance of treatment.

Complete surgical excision with subsequent reconstruction remains the definitive treatment for symptomatic disease. Increased public awareness and early recognition are essential to prevent long-term morbidity associated with this preventable condition.

Keywords: Penile paraffinoma, sclerosing lipogranuloma, penile reconstruction

Introduction

Penile augmentation by injection of mineral oil or paraffin has been practised in certain Eastern European and Asian cultures to increase penile length and girth, under the belief that it enhances masculinity and sexual satisfaction. These procedures are usually performed by non medical individuals in non sterile environments, leading to acute complications such as soft tissue infection, urinary tract infection, sepsis, necrosis, and paraphimosis, as well as late sequelae including penile paraffinoma (1).

Penile paraffinoma, also termed sclerosing lipogranuloma, is a rare chronic granulomatous inflammatory condition caused by subcutaneous paraffin injection. Humans lack the enzymes to metabolise mineral oils, resulting in a persistent foreign body giant cell reaction. This leads to progressive fibrosis, penile deformity, pain, erectile dysfunction, impaired sexual function, and reduced quality of life (2).

Patients typically present with penile pain, induration, erythema, oedema, phimosis, or painful intercourse. Advanced disease may cause enlargement, ulceration, necrosis, secondary infection, fistula formation, Fournier's gangrene, or rarely granulomatous inguinal lymphadenopathy due to paraffin migration. Symptoms may persist for years if untreated (3).

Definitive management requires complete surgical excision of affected tissue, often followed by complex reconstruction. Despite surgery, cosmetic and functional outcomes may be suboptimal, and recurrence has been reported. This case series presents two patients with penile paraffinoma managed at Bedfordshire Hospitals NHS Foundation Trust, highlighting their clinical presentation, surgical management, and outcomes.

Case 1

A 56 year old Belgian man presented to the urology emergency service at Bedfordshire Hospitals NHS Foundation Trust with suspected Fournier's gangrene. His son acted as interpreter due to a language barrier. At age 28, he had undergone penile paraffin injection in a non medical, non sterile setting for cosmetic enlargement. Shortly after, he developed flu like symptoms and erythema, followed by recurrent episodes of penile pain, swelling, and erythema that only partially responded to antibiotics. Despite persistent symptoms, he repeatedly declined surgical intervention. Over the preceding year, his condition worsened, with a chronic ulcer, persistent discharge, and painful erections.

Examination revealed diffuse penile enlargement, induration, fibrosis, and deformity, with a chronic ulcer on the shaft and tender inguinal lymphadenopathy (Figure 1). Laboratory investigations showed leucocytosis (15.6 × 10^9/L, neutrophilia 75%) and elevated CRP (85 mg/dL), with normal renal and liver function. Emergency surgical debridement was performed via circumcoronal incision, excising diseased tissue. Histopathology confirmed penile paraffinoma, demonstrating xanthogranulomatous inflammation with lipid deposits, foamy macrophages, and multinucleated giant cells.

The patient recovered postoperatively and was referred to regional plastic surgery for staged penile reconstruction with grafting. This case highlights the chronic progression, diagnostic features, and need for surgical management of paraffinoma following unsafe cosmetic penile augmentation.

Case 2

A 36 year old Czech man presented to Bedfordshire Hospitals NHS Foundation Trust with a five year history of recurrent penile swelling and erythema. He had undergone paraffin oil injection for cosmetic penile enlargement, performed by a non medical individual. No immediate complications occurred, but within a year he developed recurrent swelling, erythema, and mild deformity. He denied ulceration, discharge, or urinary symptoms, and his medical history was otherwise unremarkable.

Examination revealed diffuse erythema and subcutaneous thickening of the penile skin, consistent with paraffinoma, without ulceration or lymphadenopathy. Laboratory results showed mild leukocytosis (9.8 × 10^9/L) and CRP of 15 mg/L, with other investigations normal. He was counselled on the progressive nature of paraffinoma and offered surgical excision with staged reconstruction. Although consent was initially obtained, he withdrew before surgery and was discharged on oral antibiotics with outpatient follow up. This case highlights patient reluctance despite counselling and the challenges of managing paraffinoma.



Figure 1. *Chronic penile paraffinoma demonstrating marked skin thickening, ulceration and deformity.*

Discussion

Our case series demonstrates two contrasting presentations of penile paraffinoma following paraffin injection by non medical individuals for cosmetic penile augmentation. Both patients were immigrants from Eastern Europe and presented years after the initial procedure with chronic inflammatory complications. One required emergency surgical intervention for suspected Fournier's gangrene with chronic ulceration, while the other declined definitive surgery despite counselling. These cases highlight the variability in clinical presentation, delayed healthcare seeking behaviour, and management challenges associated with this rare condition.

The practice of injecting foreign materials for cosmetic purposes dates back to 1899, when Gersuny used mineral oil as a prosthetic substitute following orchidectomy for tuberculosis. Paraffin and silicone were later employed for breast augmentation and facial reconstruction, but high rates of lipogranulomatous inflammation led to abandonment in mainstream practice (4). Nevertheless, penile augmentation by paraffin injection persists in certain Eastern European and Asian countries, particularly among socially marginalised groups such as sailors, gang members, drug users, and sex workers (5,6).

True prevalence is underestimated due to stigma and delayed presentation. Diagnosis is primarily clinical, based on history and examination findings of pain, erythema, induration, thickening, and deformity. Advanced disease may progress to ulceration, discharge, infection, strictures, lymphadenopathy, or Fournier's gangrene, as seen in our first patient. Differential diagnoses include syphilis, lupus vulgaris, lymphogranuloma venereum, and penile carcinoma. MRI may help define disease extent, while histopathology confirms chronic xanthogranulomatous inflammation with lipid vacuoles, foamy macrophages, and multinucleated giant cells (7,8).

Complete surgical excision remains the treatment of choice. Small lesions may be excised with primary closure, while extensive disease requires radical excision and reconstruction using grafts or flaps. Complications include graft loss, fibrosis, poor cosmesis, and recurrence. Given the absence of effective non surgical therapy, prevention through public education and clinician awareness is paramount.

Conclusion

Penile paraffinoma is a rare but potentially debilitating complication of non-medical penile augmentation. Diagnosis is primarily clinical and treatment usually requires complete surgical excision with reconstruction. Early recognition and public awareness remain essential to prevent delayed presentation and long-term morbidity.

References

1. Picozzi SC, Carmignani L. Paraffinoma of the penis. Int J Emerg Med. 2010; 3(4): 507-8.
2. Ahmed U, Freeman A, Kirkham A, Ralph DJ, Minhas S, Muneer A. Self-injection of foreign materials into the penis. Ann R Coll Surg Engl. 2017; 99(2): 78-82.
3. Bjurlin MA, Carlsen J, Grevious M, et al. Mineral oil-induced sclerosing lipogranuloma of the penis. J Clin Aesthet Dermatol. 2010; 3(9): 41-4.
4. Inn FX, Imran FH, Ali MF, Ih R, Z Z. Penile augmentation with resultant foreign material granuloma and sequelae. Malays J Med Sci. 2012; 19(4): 81-3.
5. Jeong JH, Shin HJ, Woo SH, Seul JH. A new repair technique for penile paraffinoma: bilateral scrotal flaps. Ann Plast Surg. 1996; 37(4): 386-93.
6. Foxton G, Vinciullo C, Tait CP, Sinniah R. Sclerosing lipogranuloma of the penis. Australas J Dermatol. 2011; 52(3): 12-14.
7. Hes O. Urologická patologie. In: Záme?ník J, editor. Patologie. Vol. 2. Prague: LD Prager Publishing; 2019. p. 599.
8. Murao GB, Dami A, Farina U. Paraffinoma of the penis: one-stage repair. Arch Esp Urol. 1996; 49(6): 648-50.