

CASE REPORT

Penile paraffinoma and ulcers of penis

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Abstract: The authors describe a case of 33 year old Caucasian married man with an irregular 6 cm penile mass associated with multiple penile ulcers. He reluctantly admitted that 10 years ago he had multiple mineral oil (Vaseline) self injections into the penis, for penile enlargement purposes. The patient had a surgical intervention 10 years ago, but he has recurrent ulcers on his penis. We have administered an intravenous antibiotic therapy combined with local therapy. The term paraffinoma describes a distinct histopathological finding that results from the injection of foreign oily substances into the skin. Although such procedure may be considered rare, they are still performed in some countries. The major point we want emphasis is following: a lot of people seek penile augmentations, it is necessary to remind physicians and the public that nonscientific and inadequate procedure such as Vaseline may lead to debilitating and destructive consequences (*Tab. 1, Ref. 12*). Full Text in free PDF www.bmj.sk.

Key words: paraffinoma, self-injection mineral oil (Vaseline), penile augmentations, penile deformity.

The term paraffinoma describes a distinct histopathological finding that results from the injection of foreign oily substances into the skin. The injections of foreign substances into the penis for the purpose of augmentations may result in erectile dysfunction, voiding difficulties and severe deformities (1). Many years ago, mineral oils, particularly liquid paraffin and soft paraffin, were used to improve body contour (face, genitalia, and breast) (2). The first paraffin injection into male genitalia for penile augmentation was reported by Gersuny in 1899. Paraffin injection was performed in the scrotum of the boy who had undergone a bilateral orchiectomy for genital tuberculosis (3). The adverse events from the injections of these substances were reported as early in 1906, when two patients who had received paraffin injections for facial wrinkles developed disfiguring subcutaneous nodules at the site of injections (4, 5). Paraffinoma results from mineral oil injections, and although such procedure may be considered rare, they are still performed in some countries in Eastern Europe and Far East like Korea (5, 6).

Material and methods

The patient was a 33 year old Caucasian married man. In history he had just ordinary childhood diseases. Past surgical history – appendectomy, and reconstruction procedure related to mechanical obstruction and edema caused by self injections of mineral oil in subcutaneous tissues in his penis 10 years ago. In epidemiologic history he has admitted sexual contact with his wife and denied any extramarital sexual contacts. He denied any

chronic medical diseases; he did not use any medications. He did not know about any allergy to drugs. His family history was noncontributory. He came to our clinic for the treatment of recurrent ulcers of his penis. He has admitted a frequent period of ulcerations on his penis since he underwent a reconstructions surgery in 1999. He stated that he had at least once or twice per year the ulcerations on his penis. At first, he had used various over the counter ointments to treat him with various successes. He was advised to visit our clinic by a primary care physician. He stated that he had non healing ulcers on his penis for approximately 3 weeks. He admitted that since his ulcers began (3 weeks) he used antibiotic (doxycylin) prescribed by physician, for 7 days without any local improvement. We have taken blood samples for the most of sexually transmitted infections. We had a positive cultivation only from his urethra for *E. coli* and from ulcers (*Klebsiella* spp., *Staphylococcus epidermidis*, and *Pseudomonas aeruginosa*). The rest of the test was negative (RPR, TPHA, HIV 1, 2, urethral cultivations for *n. gonorrhoea*). He was admitted to the hospital to treat ulcers and further investigations (Tab. 1).

Local dermatologic finding

There was an irregular 5 cm penile mass on his penis associated with non symmetrical ulcers localized on the dorsum of his penis, the diameter ranged from 0.5x3 cm, the bottom of the ulcers were covered by yellow film, with productions amber colored fluid, surrounded by erythematous and edematous soft tissue. On the palpations, there were enlarged inguinal lymphatic nodes bilaterally, firm, non painful, of size approximately 0.5 cm.

Laboratory findings

A complete blood count was without any significant abnormality, the differential count showed elevated lymphocytes 42.7 % and monocytes 8.1 % and the rest was within the normal

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limit, the biochemistry panel was within the normal limits, FW 5/8, C-reactive protein <5.

Tests for STDs: *negative* – HIV, 1, 2, RPR, TPHA, VDRL, FTA-ABS IgM, FTA-ABS-IgG,

ELISA IgM, Chlamydia trachomatis L1-L3 ELISA, Paul Bunnell reaction, Haemophilus ducreyi – cultivation from ulcer, Yersinia enterocolitidis, urethral cultivations Ureaplasma urealyticum, urethral cultivations for Mycoplasma hominis, urethral cultivations for Trichomonas vaginalis, *positive* – cultivation from urethra for E. coli, cultivations from ulcer – Klebsiella spp., Staphylococcus epidermidis, Pseudomonas aeruginosa.

Therapy

Gentamycin 80 mg i.v. twice a day for 7 days, acidum folicum, local treatment of ulceration – tannin solution, rivanol solution, antibacterial ointment.

Diagnosis

- Penile paraffinoma
- Bacterial infections of ulcers
- Inguinal lymphadenopathy bilateral

Discussion

Paraffinoma is a histopathological pattern demonstrating the replacement of normal subcutaneous tissue by cystic spaces and vacuoles of vaseline in various size, resembling a Swiss cheese. These spaces appear empty when stained with hematoxyline and eosin, however, several frozen tissue stains have been used to demonstrate nonabsorbable, encysted oil (7). Dense fibrous tissue and various inflammatory cells, including foreign-body giant cells, encircle these lakes of oil. The indurations may not be due to an extensive fibrosis, but due to lymphatic obstructions engorged with the nonabsorbable agents (8). The paraffinoma consist of granulomatous foreign-body reaction that can result from the mineral oil injections into any part of the skin. Paraffinomas can occur many years after the primary injections (5).

In the study including 20 men in Korea the authors studied the purpose of penile augmentation and the outcome. Fifty percent of subjects wanted to increase their potency, twenty five percent wanted to satisfied the sexual partner, fifteen percent wanted to treat erectile dysfunction, and ten percent wanted to increase their psychological comfort. None of the patients were satisfied. In the same study also complains were evaluated. Sixty percent had a painful erection, fifty percent had progressive migrations, forty percent had skin necrosis and discharge, thirty percent had difficulty of penetration, 1;0 % percent had voiding difficulty (9).

In the large series of 375 men who injected mineral oil for enlargement of their penises, 91 % were not satisfied and 74 % of them wanted to remove the injected material (6).

Penile augmentation by localized injection of paraffin, Vaseline or mineral oil has been documented to result in significant penile deformity and dysfunction. As a result, modern medical professional in western world have largely abandoned in practice. However, reports continue to be published in Easter Europe

and Asia documenting the persistent localized injection of oil for penile augmentation. A complicating factor for diagnosis of penile paraffinoma is a protracted latency period from the time of initial injection to the development of penile deformity. This lag-time has been documented anywhere from 1 to 20 years after the injection of oily substance into the genitalia (Figs 1–3). Therefore treating specialist must consider penile paraffinoma in differential diagnosis of an irregular penile mass, as the initial injection may be forgotten in distant memory (10).

The major point we want to point out is following: many people seek penile augmentations, so it is necessary to remind physicians and the public that nonscientific and inadequate procedure such as Vaseline may lead to debilitating and destructive consequences. Increased public awareness is needed for the prevention of this physically and psychologically debilitating problem (11). In additions, physician should be aware of such injections because patients are very reluctant to admit that they had performed these injections. The momentum should be the word of our patient “I deeply regrets what I have done. In fact that affected my sexual life in negative ways”.

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