

# A Case Report: Penile Ulcer Caused by Lintah Oil Injection

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## ABSTRACT

**Background:** Lintah oil that was injected for genital augmentation, can cause penile ulcer, which is also one of the ulcer that occur due to 'self-inflicted'. It could occur in nodul or abscess formation, and undergoes ulceration. It can cause psychological stress to affected patient, so that a proper diagnosis is expected to support well management. **Purpose:** To describe the clinical manifestation, laboratory examination, and management of penile ulcer caused by lintah oil injection. **Case:** A 58-year-old male presented a single deep wound on his shaft penis, with diameter  $\pm 2 \times 5$  cm, undermined, ragged edges, containing pus and easily to bleed, occurred about 6 months after the injection of lintah oil, which was used for his genitalia enlargement and performed by untrained person. There were complaints about redness skin and swelling on his shaft penis about 3 months after the injection, which then underwent fester with the sense of burning sensation and painful. **Discussion:** Blood examination indicated a slightly increase of leukocyte. Pus culture and sensitivity test were performed, while waiting for the result, patient was given cotrimoxazole tablet 480 mg twice daily for seven days. Another examination result were within normal limit. Treatment consisted of oral antibiotic for seven days, and for the wound dressing has given NaCl 0.9% as the wet dressing and covered with framycetin sulfate 1% gauze. **Conclusion:** Diagnosis of penile ulcer caused by lintah oil injection was established by patient's history and physical examination. Therapy was given based on culture result. Lesion was healed after 1 month of treatment. Education not to repeat the injection was given to the patient to prevent the recurrence of this condition.

**Keywords:** penile ulcer, lintah oil injection, wound care.

## ABSTRAK

**Latar Belakang:** Minyak lintah yang diinjeksi dengan tujuan untuk memperbesar alat kelamin dapat menimbulkan ulkus penis yang terjadi akibat kesalahan sendiri. Injeksi minyak lintah dapat menimbulkan nodul atau abses, hingga ulserasi. Hal itu dapat menimbulkan stres psikologis pada pasien, sehingga diagnosis yang tepat dibutuhkan untuk mendukung penatalaksanaan yang baik. **Tujuan:** Mendeskripsikan gambaran klinis, pemeriksaan penunjang, serta diagnosis dari ulkus penis karena injeksi minyak lintah. **Kasus:** Laki-laki 58 tahun dengan keluhan luka tunggal yang dalam pada penis dengan ukuran  $\pm 2 \times 5$  cm, berbatas tidak teratur, bernanah, dan mudah berdarah, terjadi sekitar 6 bulan yang lalu setelah injeksi minyak lintah yang bertujuan untuk memperbesar alat kelamin, yang dilakukan oleh orang yang tidak terlatih. Pasien mengeluh adanya kulit kemerahan dan bengkak pada penis sekitar 3 bulan setelah diinjeksi, kemudian menjadi bernanah yang disertai dengan rasa terbakar dan nyeri. **Diskusi:** Pemeriksaan darah menunjukkan sedikit peningkatan leukosit. Kultur dan uji sensitivitas dilakukan, sambil menunggu hasil, pasien diberi tablet kotrimoksazol 480 mg dua kali sehari selama 7 hari. Hasil pemeriksaan lain dalam batas normal. Pengobatan terdiri dari antibiotik oral selama 7 hari dan untuk perawatan luka diberikan NaCl 0,9% sebagai kompres basah dan ditutup dengan kasa *framycetin sulfate* 1%. **Simpulan:** Diagnosis ulkus penis yang disebabkan oleh injeksi minyak lintah ditegakkan berdasarkan anamnesis dan pemeriksaan fisik. Terapi diberikan berdasarkan hasil kultur. Lesi sembuh setelah 1 bulan pengobatan. Edukasi berupa saran untuk tidak mengulangi injeksi diberikan kepada pasien untuk mencegah rekurensi penyakit.

**Kata kunci:** ulkus penis, injeksi minyak lintah, perawatan luka.

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## INTRODUCTION

Penis size has been a source of anxiety for men through history, and even today men often feel the need to enlarge their penis to improve their self-esteem or to satisfy and/or impress their partners.<sup>1</sup> Attempts to change the body contour have been made since the nine-teenth century, with numerous foreign materials introduce into different body organs (e.g

penis, breast, cheek, nose, eyelids, and muscles). The injection of high-viscosity fluids such as paraffin, to achieve penile augmentation has been reported in Asia, Russia, and Eastern Europe. These injections can stimulate multiple undesired reactions that can eventually cause an inability to achieve sexual activities.<sup>2,3</sup>

Self-inflicted penile ulcer are deliberately induced by injecting certain materials, including drug and oil containing substance into the skin. A lesion caused by the injection of an offending material may initially appear in the form of a nodule or an abscess, which subsequently undergoes ulceration.<sup>4</sup>

The diagnosis is based on clinical findings and patient's history of injection some material directly into the skin. There were several pathophysiology mechanisms for ulcer, such as the drug itself, irritant or caustic effect of adulterans or excipients, and the use of contaminated needles with consequent infection.<sup>4</sup> Treatment for penile ulcer depends on the condition, the choices should be radical excision or directed to decrease the symptoms, particularly to decrease the pain and wound care for the deformity of penis.<sup>2-4</sup>

Patient with self-inflicted penile ulcer has psychological problems, particularly their sexually activity. They could not have sexual activity with their partner. They also feel ashamed with the lesion and regretting.<sup>3,4</sup> Although lintah oil is certainly not common, clinicians need to be aware of this entity, especially because of the number of lintah oil user increases.<sup>5</sup>

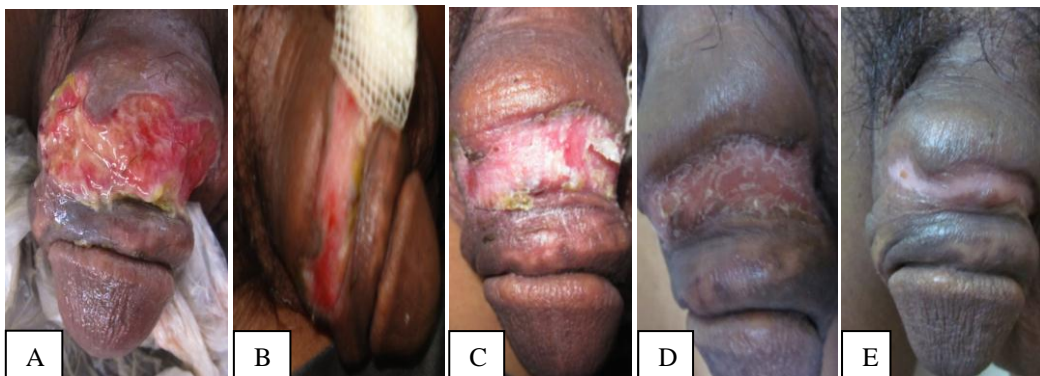
## CASE REPORT

Fifty-eight year-old man was admitted to Dermatovenereology Department Ward of Dr. Soetomo General Hospital Surabaya, with painful

wound on his shaft penis. Wound on his shaft penis appeared since 3 months before the admission. Six months before admission to the hospital, he reported of having penis subcutaneous lintah oil injection with aim of penile enlargement, performed by an untrained person. Three months after the injection, some pimple occurred at the injection site. Pimple became numerous and larger, then changed into multiple bumps. In several days, bumps were getting broken into a wound, which was easily to bleed and producing pus. Patient complained about burning sensation and very painful on his shaft penis. There were history of taking mefenamic acid tablet when he suffered from the pain. There were history of having sexual with sexual worker about 10 years before he got injected. There was no history of trauma on his penis and drug allergy before. History of having the same disease before was denied. There were no discharge from his penis. Significantly decreasing of the body weight was denied.

General physical examination at first day of admission was alert, looked ill, no sign of anemic, cyanotic, icteric and dyspnea. The blood pressure was 110/80 mmHg, pulse rate was 88 times per minute, and body temperature was 37.5°C.

Dermatological examination on his shaft penis showed single lesion ulcer which was soft, deep, with diameter 2 x 5 cm, circumscribed, with undermined dragged edges, easily to bleed, dirty, purulent base, and without crust. There were no edema on his penis.



**Figure 1.** A. First day of admission B. 6 days hospitalized C. Day 1 outward D. Day 7 outward E. 1 month treatment.

Laboratory examination on the first day of admission revealed hemoglobin 12.2 g/dL, and white blood count 12.5 K/uL. The result from urinary test was normal. Pus culture examination revealed *Klebsiella* that was sensitive to clotrimazole. Gram staining examination revealed no *Unna ducreyi*, the result of dark field examination and Venereal Disease Research Laboratory (VDRL)-*Treponema pallidum* Hemagglutination (TPHA) were also negative.

The treatment was oral antibiotic cotrimoxazole 480 mg tablet, given twice daily. Mefenamic acid was also given twice daily. Wet dressing with NaCl 0.9% was given in order to drain the secret on the shaft penis. Framycetin sulfate 1% gauze was applied to absorb the pus and as an antibiotic topical. Natrium fusidat cream applied after there was no more pus and blood. The patient was instructed to do wound care for daily routine.

On the sixth day of treatment, patient discharge from hospital. There were well-circumscribed ulcer and slightly bleeding but no more pus. Therapy was cotrimoxazole tablet 480 mg and wound covered with framycetin sulfate 1% gauze.

In outpatient clinic, 8 days after discharge, there were ulcer without maceration, blood, and pus. The therapy was natrium fusidat cream. There were still an ulcer on day 15 after discharged, but with improved condition. A month after discharge the ulcer healed and granulation tissue was appeared.

## DISCUSSION

This case report describes 58 year-old man who is admitted with main complaint of painful ulcer caused by *lintah* oil injection on his shaft penis which was easily to bleed and contained of purulent secretion. The patient reported having penis subcutaneous *lintah* oil injection 6 months previously, which performed by an untrained person, for augmentation of the penis contour. This was the first time patient got injected before the lesion occurred. Physical examination on admission revealed soft, circumscribed with diameter 2 x 5 cm, undermined ragged edge penile ulcer, which contained of pus and easily to bleed. From laboratory examination there were slightly increase of white blood count serum.

When confronted with other case of penile ulcer, it may be difficult to diagnose this disease. First, because there is no research about what is the composition of *lintah* oil, also there was only in Indonesia that the augmentation of penis contour using *lintah* oil, whereas some literature and research only discuss about augmentation of penis contour using paraffin oil and silicone.<sup>2,5</sup> Fortunately, the clinical manifestation of penile ulcer caused by *lintah* oil injection mimicking paraffinoma and ulcer which is caused by silicone injection.<sup>2,5,6</sup>

In this case, the diagnosis of penile ulcer caused by *lintah* oil injection was made from history of patient and clinical findings. Routinely laboratory examination, pus culture, and sensitivity test were performed to decide the treatment. Gram staining, dark field, VDRL-TPHA examination were used to differentiate this disease with another sexually transmitted disease that is mimicking penile ulcer.<sup>7</sup>

Differential diagnosis of penile ulcer caused by *lintah* oil injection are penile tumor, paraffinoma, and chancroid.<sup>5,7,8</sup> In penile tumor, from history taking may be obtained complaint about their penis, circumcision, multiple sexual partner, previous history of condyloma, significantly decreasing of body weight. From clinical findings, it could be redness, irritation, a sore or lump on the penis. Actually the

clinical presentation of an invasive penile carcinoma is varied and may range from an area of induration or erythema to a non-healing ulcer or warty exophytic growth. The predisposition site is on the glans in 48% of cases, the prepuce in 21%, glans and prepuce in 9%, coronal sulcus in 6%, and shaft in less than 2% of cases.<sup>5,8,9</sup>

In paraffinoma, there is a similarity in history of augmentation of the penile contour. But there was a report about paraffin injection into male genitalia by Gersuny in 1899. In this case, mineral oil was injected into the scrotum of a boy who had undergone bilateral orchiectomy for genital tuberculosis. The body lacked the enzyme to metabolize interstitial exogenous oils, and a foreign-body reaction occurred, so paraffinomas consist of a granulomatous foreign-body reaction inducing a sclerosing lipogranuloma. This non-reabsorbable material may still induce granulomatous reactions, which are known to appear many years after the injection. A specific form of paraffinoma is so-called sclerosing lipogranuloma, which result from injection causing fibrosis and deformity of the penis body.<sup>10,11</sup>

Chancroid is the most mimicking diagnosis, it is an acute ulcerative disease occurring on the genital or anogenital areas, and is often associated with massive visible lymphadenitis (buboes). *Haemophilus ducreyi*, a gram-negative facultative anaerobic coccobacillus requiring blood for its growth, cause the superficial ulcerations of chancroid. There may be a history of recent sexual exposure, possibly with a commercial sex worker. The primary lesion starts as a tender papule with an erythematous halo that evolves into a pustule. Central necrosis of the pustule leads to the characteristic painful, non-indurated, sharply defined ulcer with undermined edges. The base of the ulcer is composed of friable granulation tissue covered by gray to yellowish exudates. Ulcers may be multiple and coalesce to form giant (>2 cm) or serpiginous ulcers. Ulcers can be found on the prepuce, frenulum, coronal sulcus, glans penis, and penile shaft in males.<sup>12</sup>

Management of all penile ulcer consist of wound care to recondition the deformity of penis. Eran Rosenberg *et al* in Israel on 2007 reported about penile augmentation and the treatment of choice should be radical excision, but in selected patient conservative treatment should be considered. From 3 case reports, there were many treatment that could be performed properly to the patient's condition, such as insision or intravenous antibiotic, and the result was quite good. In this patient, oral antibiotic given as antimicrobial due to the presence of discharge, and cotrimoxazole 480 mg tablet was given twice daily, in

accordance with the sensitivity test. Framycetin sulfate 1% was given as a gauze dressing. Framycetin sulfate belongs to a group of medications known as a broad spectrum antibiotic that will control and eradicate most secondary infections which may present in the lesion and at the same time will provide an excellent mechanical protection which does not adhere to granulating skin. It is easy to apply and may be removed painlessly. Application of the dressing does not result in maceration of the lesion. It is used to treat infected or potentially infected burns, wounds, ulcers, and skin grafts. Wet dressing with sodium chloride, will wick moisture away from wounds with excessive exudate.<sup>4,13</sup>

Recently, this case is quite a lot occur in Indonesia. Many untrained person injected lintah oil into penis with aim of penis augmentation and ended with painful penile ulcer. Treatment with primarily wound care is quite good and could recondition the deformity of penile ulcer.<sup>4</sup>

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