Case Letter

Quoted Baudelaire: "*Nous sommes démocratisés et syphilisés*", despite the thalidomide scandal in 60ies, the topical use of this drug with Goudron de Norvège is welcome to treat penile lichen sclerosus (PLS)

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Penile lichen sclerosis is a longstanding inflammatory disease of the skin with a controversial aetiology. Penile lichen sclerosis (PLS) is a growing, inflammatory dermatitis of the anogenital region, involving the meatus, prepuce, penile shaft, and glans penis. Although the accurate aetiology of PLS is contentious, multiple factors including genetics, autoimmunity, infections of human papillomavirus, hepatitis C, Epstein-Barr virus, and risk factors (hormonal and trauma) can be considered part of the etiopathogenesis of PLS. The initial clinical presentations of penile lichen sclerosis are white plaques, atrophied skin, erythema, erosions, and sclerosis in the anogenital region. As the disease advances, meatal constraints, telangiectasia, petechiae, soreness, papular lesions, tightness of the foreskin, difficulties in passing urine, itching, tenderness on erections, pain, cracking, bleeding, redness, rashes, tightness at the frenulum, and dysuria can occur. This disease has a dangerous course of action, and if untreated, it may be linked to severe urologic and sexual morbidities. PLS is usually treated with medical and surgical interventions such as topical or intralesional steroids and circumcision. The role of circumcision is critical in the course of action and prognosis of PLS, and its treatment depends on the stage of the disease [1].

PLS is effectively an intensifying, inflammatory dermatitis of the anogenital region with an ambiguous aetiology; the meatus, prepuce, penile shaft, and glans penis are commonly involved sites of the disease [1].

It can be distinguished as a depigmented lesion that leads to fibrosis and obstinate soreness, provoking vicious scarring [2]. Balanitis xerotica obliterans (BXO) is a long-standing lymphocyte-mediated skin problem that occurs in the anus and genital tract areas in both men and women. In 1887, Hallopeau clinically described this illness and named it lichen plan atrophic. Then, in 1892, Darier called it lichen plan sclerux. In 1928, Stuhmer was the first to describe the male version of lichen sclerosis, called BXO. BXO has three components: balanitis, described as long-standing swelling and tenderness of the glans penis; xerotica, an unusually arid exterior of the graze; and obliterans, indicating its connection with sporadic endarteritis. In 1976, the International Society for the Study of Vulvovaginal Disease formally accepted lichen sclerosis to define this disease in both genders [3].

PLS is most commonly seen in patients aged 30–49 years, but it has also been observed in children and the elderly [4]. Men are usually diagnosed with lichen sclerosis at a younger age, with a peak between the ages of 30 and 50 [5].

Signs and symptoms of lichen sclerosis include pallor, itching meatal stricture, telangiectasia, petechiae, ulcers, papular lesions, bleeding, tensed foreskin, tight frenulum, dysuria, difficulty in passing urine,

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tenderness on erections, pain, cracking, redness, and rash [1].The usual spectrum of male lichen sclerosis is wide, which often leads to significant morbidity. Sometimes, it doesn't display any symptoms, but most of the time, it looks like the preputial and urethra aren't working right, causing male dyspareunia [6].

According to various research results, it was established that the lichen sclerosis of males is unambiguously a disease associated with uncircumcised males. Foreskin plays an imperative function in the aetiology of male lichen sclerosis, although it can occur in circumcised males as well who have hypospadias, genital jewellery after any surgery, instrumentation, or trauma [7].

The 1% topical formulation of pimecrolimus has received FDA approval for treating mild-to moderate atopic dermatitis. The drug has many off-label uses, including oral lichen planus, psoriasis on the face and intertriginous areas, vitiligo, lichen sclerosis of the vulva, and seborrheic dermatitis [5].

Here, the AA face the resemblance between Zoon's plasma cell balanitis and PLS. Zoon's plasma cell balanitis is nothing but a chronic genital inflammatory dermatosis that affects uncircumcised men, especially the elderly. It's characterized by painless erythematous plaques of an orange hue located on the glans penis and foreskin. Circumcision is the most effective treatment; however, it can be hard for patients to accept. As an alternative, topical calcineurin inhibitors are used, with a good response.

Treatment with topical tacrolimus can be usually administered, but often without improvement. A 6-week course of topical usage of thalidomide (1% lanolin + cera microcristallina ointment) resulted in complete remission of the lesions without recurrence after eight months of follow-up.

The AA proposed the employ of a topical combination of the notorious and risky thalidomide with pine tar or Goudron de Norvège, which acts owing to the high percentages of methylcreosol, phenol, phlorol, and toluene to cure definitively this embarrassing penile disease that, moreover, inhibits sexual encounters.

Regarding the thalidomide scandal, it must be stressed that in the late 1950s and early 1960s, the use of thalidomide in 46 countries by women who were pregnant or who subsequently became pregnant resulted in the "biggest man-made medical disaster ever," with more than 10,000 children born with a range of severe deformities, such as phocomelia, as well as thousands of miscarriages [8].

Thalidomide was introduced in 1953 as a tranquillizer and was later marketed by the German pharmaceutical company Chemie Grünenthal under the trade name Contergan as a medication for anxiety, trouble sleeping, tension, and morning sickness. It was introduced as a sedative and medication for morning sickness without having been tested on pregnant women. While initially deemed safe in pregnancy, concerns regarding birth defects were noted in 1961, and the medication was removed from the market in Europe that year. Since some researchers had proposed the usage of topical thalidomide to cure oral lichen planus, the AA tried to use the same concentration of this perilous drug with Goudron de Norvège to treat PLS [9].

Six men (aged 13–56 y) who suffered from PLS decided to undergo this topical experimentation that lasted seven days (three applications per day) and made up their minds to change underwear and throw it away (everyone had to fritter away 21 underpants in honour of the Noble Research). All the symptoms they had recorded before the treatment disappeared right after the fifth day of application.

In conclusion, penile lichen sclerosis is a complex dermatological condition with various etiological factors and clinical manifestations. While treatment options exist, including medical and surgical interventions, careful consideration of the risks and benefits is essential in managing this condition effectively.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

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