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CASE SERIES

TREATMENT OF VULVAR LEUKOPLAKIA WITH THERESIENOL – A NEW OPPORTUNITY

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Abstract

Introduction. The vulvar leukoplakia includes several diseases. The most common are vulvar lichen sclerosus and squamous cell hyperplasia of the vulva. These two conditions have many common features, but also have significant differences. Both of them have a risk of malignancy, and a risk of relapse after therapy.

Cases presentations. We present four patients with clinically diagnosed vulvar leukoplakia. The therapy for all of them continued between two and three months, and subsequent one-year follow-up was carried out. The vulvar lichen sclerosus and squamous cell hyperplasia of the vulva have similar etiology, and clinical signs and symptoms, but different histopathological features, which also necessitate different therapeutic methods – conservative or surgical. All conservative therapeutic options have their side effects, while the surgical ones do not result in definite healing – the possibility of relapse of disease is present. In our cases, we observed rapid and stable response on the part of the clinical signs and symptoms with no complications.

Résumé

Le traitement de la leucoplasie vulvaire à l'huile de Thérèse – une nouvelle perspective

Introduction. La leucoplasie vulvaire n'est pas un diagnostic histologique et comprend plusieurs conditions. Les plus communes d'entre elles sont le lichen scléreux vulvaire et l'hyperplasie squameuse de la vulve. Ces deux conditions présentent de nombreuses caractéristiques en commun, mais également de grandes différences. Dans les deux cas il y a le risque de malignité ou de rechute de la maladie après un traitement avisé curatif.

Rapport du cas. Nous présentons quatre patients avec un diagnostic clinique de leucoplasie vulvaire, traités à l'huile de Thérèse. Tous les patients avaient leur traitement durant deux à trois mois et ils étaient en suivi pendant un an après. Le lichen scléreux et l'hyperplasie squameuse vulvaire ont d'étiologie similaire, ainsi que des signes et symptômes cliniques. Ils ont aussi des particularités histopathologiques qui nécessitent également de traitements différents – conservatif ou par chirurgie. Toutes les options thérapeutiques

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Conclusions. Due to disturbance of the quality of life upon manifested clinical presentation, the vulvar leukoplakia requires treatment. The therapy with TheresienOl is effective about the clinical symptoms, but only further follow-up and inclusion of new patients will show whether the risk of occurrence of vulvar cancer decreases.

Keywords: vulvar leukoplakia, lichen sclerosus, squamous cell hyperplasia, TheresienOl.

Abbreviations:
VLS = vulvar lichen sclerosus
SCHV = squamous cell hyperplasia of the vulva
LS = lichen sclerosus

conservatoires ont des effets secondaires. De l'autre part, la chirurgie n'entraîne toujours pas de guérison définitive à risque de récidive de la maladie toujours présente et non-négligeable. Dans nos cas, nous avons traité nos patients avec de l'huile de Thérèse et nous avons observé une réponse rapide et stable de tous les signes et symptômes cliniques sans complications ou malignité.

Conclusion. Concernant la perturbation de la qualité de la vie lors de la présentation clinique, la leucoplasie vulvaire nécessite d'être traitée. Le traitement à l'huile de Thérèse est efficace en regard de symptômes cliniques, mais seulement un suivi complet et prolongé ainsi que le traitement d'autres patients peuvent montrer si le risque de malignité de la condition soit en diminution.

Mots-clés: leucoplasie vulvaire, lichen scléreux, hyperplasie squameuse vulvaire, l'huile de Thérèse.

Introduction

There are two diseases of the vulva, which are combined under the name of non-neoplastic epithelial disorders of the vulva: vulvar lichen sclerosus (VLS) and squamous cell hyperplasia of the vulva (SCHV). They have different pathological features and similar clinical behaviour. They are also called white lesions of the vulva because the vulvar skin and mucous membrane of the patient might appear white[1]. The frequency of non-neoplastic epithelial disorder of the vulva is 1 out of 300 to 1 000[2].

VLS is a chronic dermatosis with a predilection for keratinized vulvar skin. It has two diagnostic histopathological features: a lichenoid tissue reaction and dermal collagen homogenization, and it is mainly characterized by atrophy and thinning of the skin of the vulva and/or crissum. On the opposite, the skin is growing too thick in the case of SCHV.

The diagnosis of these diseases can be made clinically, but it is often confirmed by histological examination[3]. Symptoms may include: pruritus, burning, or stinging of the vulva, pain when having sex, a white or gray patch of thickened or thin skin on vulva, sometimes with scaling. Both conditions have also malignant potential: 3 to 6% for VLS, and 2 to 4% for SCHV[1].

The treatment of this disease includes different local preparations with corticosteroids, estrogens or testosterone, and also different destructive techniques as laser, alcohol denervation and – and in the last resort – surgical removal. We offer our experience with new herbal oil (TheresienOl), that we used in four women. The diagnosis was made based on the clinical signs and symptoms, and it was not confirmed histologically, while our objective was to find the effect of the medication on the symptoms and the duration of its activity.

Cases presentations

First clinical case: This is a 36-year-old patient with complaints of severely pronounced itchiness in the area of the vulva, which exacerbated at night-time. There were no previous operations or diseases. Patient had given birth to two children. No changes were found by the gynecological examination except for subtle leukoplakia in the area of labia majora. The patient had undergone antimycotic therapy with no response. Patient initiated treatment with TheresienOl twice daily, with complete fading of the symptoms on Day 7; there were no traces from changes on the part of the skin on Day 60 as well (Fig. 1). There were no complaints at the follow-up examination one year after the onset of treatment.

Second clinical case: This is a 65-year-old patient with severely pronounced itchiness at night-time, who had undergone skinning vulvectomy due to VLS ten years before, and who was operated and underwent radiotherapy due to endometrial carcinoma two years ago. The patient had been in the status of amenorrhea for 16 years, had given birth to two children, and has arterial hypertension. Leukoplakia of the vulva was found by a gynecological examination. Patient initiated therapy with TheresienOl twice daily, with complaints that disappeared on Day 25 (Fig. 2). The treatment continued for two months, and there were no complaints one year after its onset.

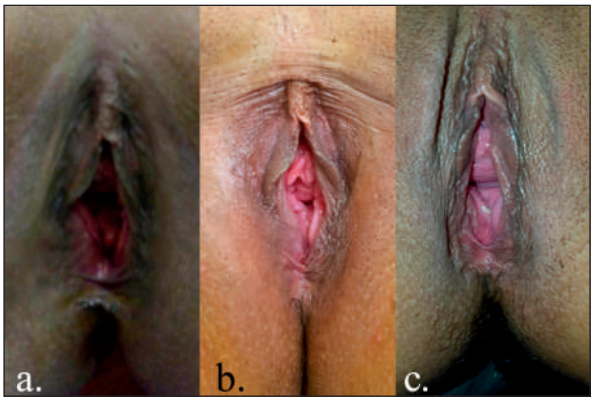

Figure 1. a) The day of the beginning of the treatment; b) The day 14 of the treatment; c) The day 60 of the treatment

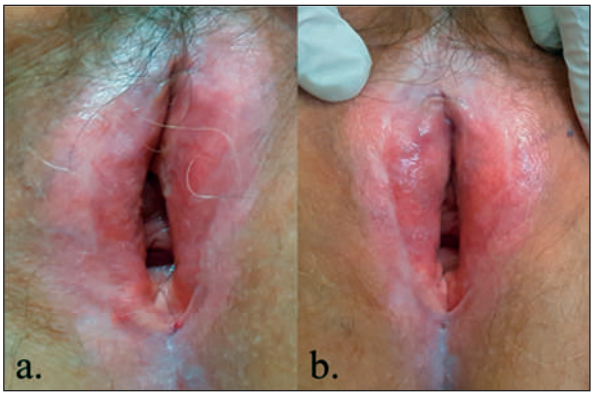

Figure 2. a) The day of the beginning of the treatment; b) The day 14 of the treatment

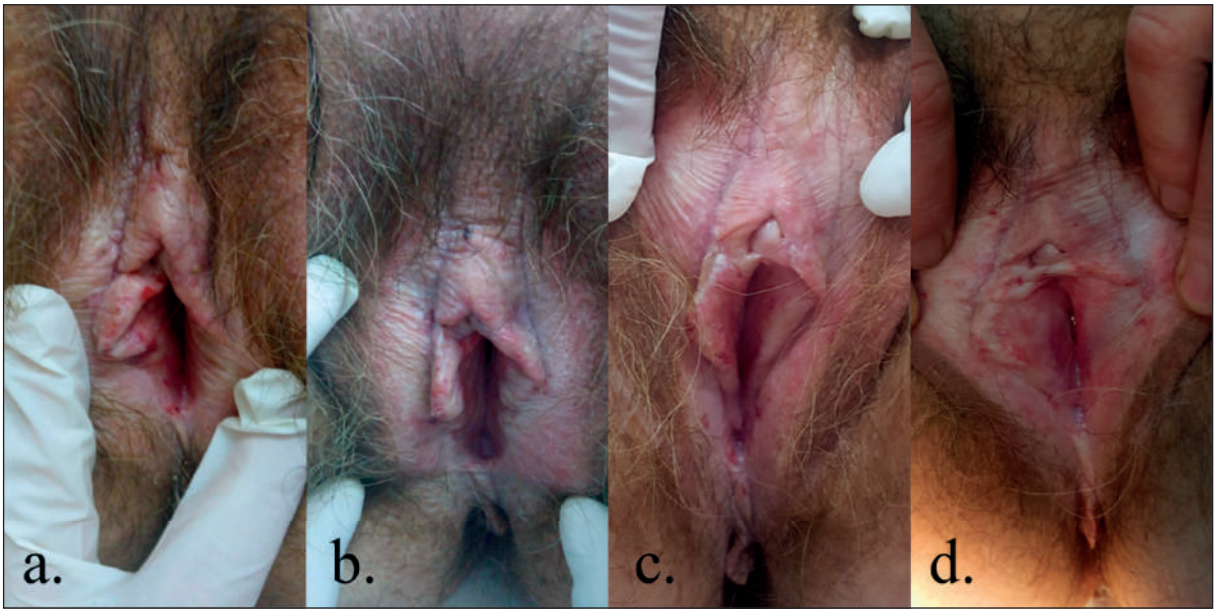

Figure 3. a) The day of the beginning of the treatment; b)The day 14 of the treatment; c) The day 30 of the treatment; d) The day 60 of the treatment

Third clinical case: This is a 73-year-old patient with severely pronounced night-time itchiness, who was operated three years ago, and underwent radiotherapy due to carcinoma of the uterine cervix. Patient had been in amenorrhea for 23 years, has arterial hypertension, and had given birth to two children. Coarse leukoplakia was found by gynecological examination with traces from the scratching of the vulva. Therapy with TheresienOl twice daily was initiated with a significant reduction of complaints on Day 15, and complete fading away on Day 30. The treatment continued for three months, and there were no complaints one year after its onset (Fig. 3).

Fourth clinical case: This is a 72-year-old patient with pronounced night-time itchiness, who underwent skinning vulvectomy two years ago due to VLS. Patient had had amenorrhea for 25 years, had given birth to two children, and has arterial hypertension. The patient initiated treatment with TheresienOl twice daily, while her complaints completely faded away on Day 27. The treatment continued for three months, and there were no complaints one year after its onset (Fig. 4).

Discussion

Although VLS and SCHV have similar etiological factors and clinical signs, they differ from one another. The development of these diseases is affected by multiple factors – it is associated with immunity, sex hormones, injuries, environment, enzymes, free radicals, apoptosis; it is assumed that VLS and SCHV are genetic immune diseases[1].

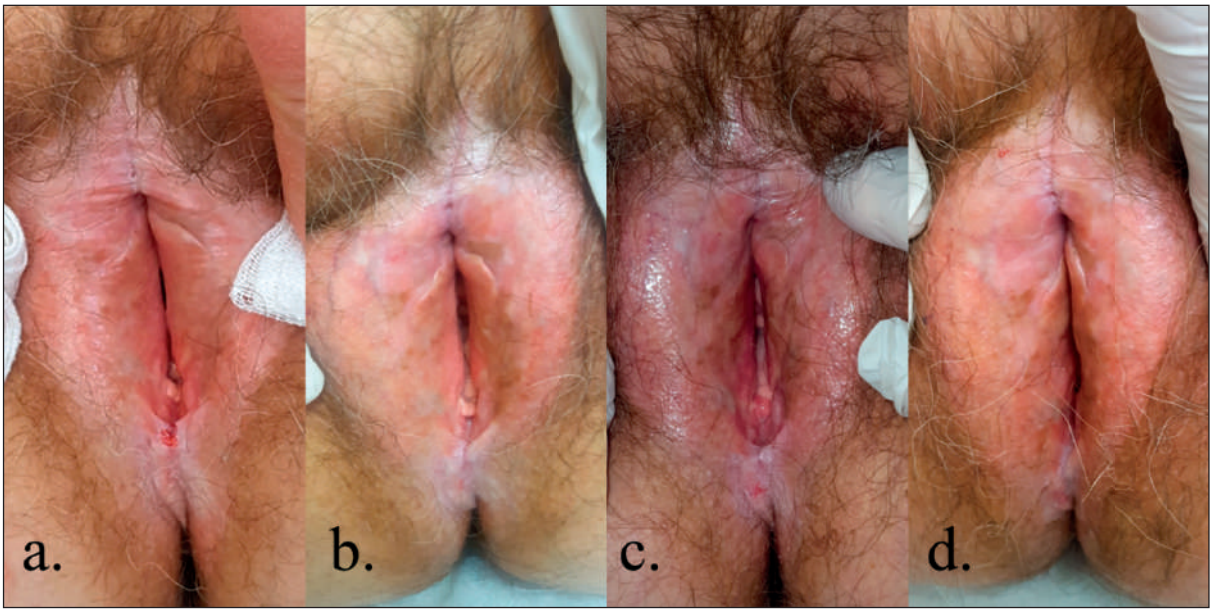

Figure 4. a) The day of the beginning of the treatment; b)The day 14 of the treatment; c) The day 30 of the treatment; d) The day 90 of the treatment

Lichen sclerosus (LS) is a chronic inflammatory skin disease, and it mainly affects the female anogenital area[4,5]; it is also seen on extragenital skin locations in up to 20% of patients with anogenital disease[6-9]. From 6 to 15% of all LS cases, there is manifestation only on extragenital locations[8,9]. The classical histological findings of lichen sclerosus are thinned epidermis and/or loss of rete ridges, hyperkeratosis, edema and/or hyalinization, as well as a chronic band-like inflammatory cell, infiltrate of the dermis[10]; there are, however, a lot of variations to these classical histological characteristics, resulting in a myriad of lesions that may be classified as lichen sclerosus[11]. Most patients affected by LS are postmenopausal, but there is also a peak in incidence among prepubertal girls[7,9,12]. The association with organ-specific autoimmune disease has resulted in LS being regarded as an autoimmune phenomenon[13]. Familial clustering of VLS has also been observed in several studies – it has been found to occur in sisters, mothers, and daughters, and in twin sisters including both homozygous and heterozygous twins, which suggests that humans might have a genetic predisposition to VLS[1].

The symptoms of VLS include pruritus, pain when having sex, dysuria or dyspareunia. Signs of VLS include swelling and redness of skin at the early stage, and the lesion can further progress to white, thin, dry, and chapped skin, and mucosa with a loss of elasticity as the disease advances. There can be atrophy or even a reduction in labium minus[11].

SCHV is an abnormal growth of the skin of vulva – a thickened plaque-like lesion consisting of maturing squamous proliferation with hyperkeratosis and/or parakeratosis. This condition is characterized by a pink-red vulva with overlying gray-white keratin. The major symptom of this condition is pruritus, which is more serious than the one in the case of VLS. Signs include lesions involving the labium majus, nympho-labial furrow, preputium clitoridis, and commissure labiorum posterior. In the early disease stage, the skin might appear dark red or pink, while hyperkeratotic skin might appear white.

The gold standard for the diagnosis of VLS and SCHV is a histological biopsy, but the clinical recognition of both diseases is easy[14].

VLS and SCHV may cause significant vulvar changes affecting the quality of life. It is plausible that anatomical changes resulting from them – especially from VLS – may result in sexual dysfunction[15]. Both of them have malignant potential: 3 to 6% for VLS, and 2 to 4% for SCHV[1]. It is known that VLS patients can develop vulvar SCC in several years – from 3.3 to 8.8 years[3]. With a view to the malignant potential of these diseases, many clinicians suspected that active management of VLS and SCHV can reduce the risk of malignant transformation[3].

The therapy of these diseases has similar features. Topical corticosteroids are considered the gold standard of treatment of these patients. They improve the symptoms in nearly all participants, complete relief of symptoms is achieved in about 70%, and complete remission of skin changes – in about 20%[16]. If patients do not respond to them, they can use topical calcineurin inhibitors as second-line therapy. Overuse

of super-potent topical corticosteroids may induce atrophy, telangiectasia, and striae as early as 2–3 weeks following daily application. Local estrogens are another option for the treatment of VLS, but they have serious adverse effects like increasing the possibility of endometrial hyperplasia and overstimulation[17]. Some other options for treatment of VLS are UV-A1 phototherapy, photodynamic therapy, oral acitretin, and topical progesterone/testosterone, but they should only be used as third-line therapy[18]. Surgical intervention should only be used in a limited number of circumstances, such as in patients with malignancy or for correction of irreversible scarring, adhesions and micturition difficulties or sexual dysfunction caused by the subsequent anatomical changes[16]. The use of testosterone can result in androgenic adverse effects – more common among them being clitoral enlargement, hirsutism, acne vulgaris, and amenorrhea. Another option to treat patients with SCHV is vaporization, ultrasonic surgical aspiration, loop excision, simple lesion excision, and cryotherapy. Unless all conservative measures have failed, vulvectomy and skinning vulvectomy should be avoided in these patients because of the recurrence rate and disfiguring that is secondary to the procedure[19].

In our study, four patients with vulvar changes were included; they were clinically determined as VLS and SCHV without performing ~~of~~ histological verification. The treatment with TheresienOl (herbal oil) continued from two to four months, while the follow-up – one year.

The itchiness in all patients began to subside after one week of therapy with twice- daily intake, and it completely disappeared between Day 20 and Day 30. In the period of follow-up, there were no relapses of symptoms, and no side effects were found. Skin changes were also noticed; they could not be evaluated due to the absence of histological examinations.

Management of pruritus vulvae could be divided into four stages: (i) identification of the underlying disease; (ii) restoration of the skin barrier function; (iii) reduction of any inflammatory complication; and (iv) elimination of the itch-scratch cycle by psychological affection[20,21]. The medication described acts by the following mechanisms: 1. It hydrates the tissues; 2. It reduces the bacterial invasion and reduces the inflammatory process; 3. It stimulates fibroblastic and endothelial cell migration and proliferation; 4. It stimulates the epithelization. Thus, it has an analgesic, antiseptic, hydrating, and soothing effect about itchiness[22].

The limits of our study are the small number of patients, the absence of histological verification, and a brief period of follow-up. Nevertheless, we consider that TheresienOl is an acceptable alternative to the treatment of symptoms caused by VLS and SCHV.

Conclusions

Both vulvar lichen sclerosus and squamous cell hyperplasia of the vulva have pronounced clinical signs and symptoms, which may result in disturbance of the quality of life. This necessitates their treatment, while all standard methods have side effects, and the presence of malignant potential determines the need for follow-up. The therapy with TheresienOl is effective about the clinical symptoms, while the further follow-up and inclusion of new patients will demonstrate whether the risk of occurrence of vulvar cancer decreases.

Compliance with Ethics Requirements:

„The authors declare no conflict of interest regarding this article"

„The authors declare that all the procedures and experiments of this study respect the ethical standards in the Helsinki Declaration of 1975, as revised in 2008(5), as well as the national law. Informed consent was obtained from all the patients included in the study"

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