Case Report: Vulvar Condilomas - New Local Synergistic Treatments

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Introduction

Infection by Human Papillomavirus (HPV) is one of the most frequent sexually transmitted diseases, with an increasing incidence in the majority of populations [1]. Condylomas or genital warts are the clinical manifestation of the viral infection by certain types of low-risk Human Papillomavirus (HPV), i.e genotypes 6 and 11. There is limited epidemiological data about the frequency and persistency of condylomas, as they are not surveyed in most health systems, it is estimated that the prevalence of new cases is around 100-200:100,000 population. The highest incidence is observed between 20 to 25 years old for women and 25 to 29 for men [2,3].

HPV warts can vary in its external aspect, from localised to widely extended forms with multicentric origin in the anus-genital tract, these lesions have got a high relapse rate both, in treated and untreated areas [2]. The absence of a single effective approach implies that practitioners usually combine different available treatments, which are chosen accordingly to each specific case.

Clinical Case

The patient was a 26 years old woman, came for a gynaecological consultation at CIMEG MADRID (Vithas La Milagrosa) in August 2020. The patient refers multiple vulvar condylomas, previously treated in a dermatological centre with a combination of cryotherapy plus sinecatechin ointment (Veregen®) twice per day. As the patient did not experience a clear improvement, referring an intense stinging when applying the ointment, a second medical opinion was asked.

Demographic data:

- Ethnicity: Latin American
- Personal disease history: No relevant chronic diseases
- Toxic habits: Smoker (3-5 cigarettes per day)
- First sexual relations: 16 years old
- Number of sexual partners: 4
- Long-term sexual partner: Not currently, lesions appeared after stable sexual partner.
- Pregnancies: No
- Contraceptive method: No
- Familial disease history: No
- Cytology: Benign cell changes, dated June 2020
- HPV vaccination: No

Physical Examination

Physical examination is considered the gold-standard in the diagnosis of condylomas, being biopsy considered a non-standard methodology, only recommended under certain circumstances such as unresponsive treatment, suspicious lesions or suspecting sexual aggression [4].
Hence, following that criteria vulvoscopy was performed in the usual lithotomy position using a colposcope. To detect smaller lesions, a 2% acetic acid staining of the vulvar region was applied. Condylomatoses was found in an extensive plaque. By visual observation protruding warts could be observed, some of them showing a reddish colour whilst some other were darker, possibly due to longer evolution and/or previously described treatment. Staining revealed smaller lesions around 1 mm were in the clitoris hood, external part of minor lips and vaginal vestibule. Thus, a vaginoscopy and colposcopy was performed, showing the absence of condylomas in the vaginal channel and cervix. The patience did not show presence of condylomas in the perianal region.

**Differential Diagnosis**

Vestibular papillomatosis: Finger-like proliferations of mucosa, centred around a connective-vascular axis. They are located in the inner part of the minor lips and sometimes extending to the vestibule. They are unrelated to the HPV, being a condition without pathological correlation.

Fordyce spots: Are heterotopic sebaceous glands with a white-yellowish pimple-like structures about 1-3 mm in diameter, either isolated or grouped into plaques. Present mainly in lower lips and internal face of upper lips.

**Other Infection-Derived Lesions**

*Molluscum contagiosum*: Viral lesions caused by Poxvirus (*Poxviridae sp.*). Can be recognised as pink or skin-coloured pimple-like structures, with a smooth surface and a characteristic central thread.

Malignant tumours: Could be suspected in case of exophytic, hard, ulcerative lesions with fleshy borders and a bleeding surface.

**Treatment**

Initially, a clear explanation is provided to the patient, in order to give a clear overview of the aims and possible evolution and potential side effect and lesion relapse that might appear.

In this clinical case, Erbium-Yag (ER:Yag) surgical laser was used, at a 2940 nm wavelength, which is well absorbed by the water in the tissues allowing an accurate wart ablation without affecting the surrounding area [5]. Two laser sessions will be applied in the vulvar area to eliminate the condylomas combined with 42 days Papilocare® external genital gel application in the affected area, during nights excluding the period. Papilocare® external genital gel will help to re-epithelialize and hydrate, because of its composition:

- Hyaluronic acid niosomes, provide hydration and elasticity.
- Antioxidant β-glucan niosomes, to maintain an adequate skin and mucosa structure.
- Centella asiatica phytosomes, heal and repair mucose lesions.
- Bioecolia, balances the genital flora.
- Aloe vera, hydrates and re-epithelializes.
- Coriolus versicolor, Re-epithelializes genital lesions.
- Neem extract, moisturizes, relieves itching and redness.

**Figure 1**: Volvuscopy observations. A) After the first laser session; B) After the second laser session and 6 weeks treatment with the Coriolus Versicolor - based genital gel; C) The result after 6 months of treatment with the Coriolus Versicolor - based genital gel after the 2nd laser session.
Papilocare® external genital gel does not contain parabens or scents, has a pH 5, adequate for the genital region [6,7].

After 6 weeks (42 days) treatment, a second local vulvar laser session is performed, and vulvar gel coadjuvant treatment is indicated. After the 2nd laser session, the patient is clinically re-evaluated after 6 weeks (42 days) treatment, showing a clear reduction in the number of lesions observed. The patient came for a final examination in March 2021, 6 months after the beginning of the treatment. Vulvar area was stained with 2% acetic acid and avulvoscopy revealed no macroscopically detectable lesions, complete remission of warts as shown in Figure 1. No other symptomatology was found, after this final examination, treatment was stopped.

Some habits were suggested to the patient:
- Stop smoking.
- Vaccination for HPV
- Use of barrier methods
- Medical check-up at 12 months after starting the treatment

HPV infection is the most frequent sexually transmitted virus and is the causal agent for condyloma, 95% of cases caused by low-risk HPV genotypes 6 and 11, although some other genotypes less frequently involved have been described, i.e 8, 13, 30, 32, 42, 43, 44, 54, 55 and 70. Importantly, up to 20-30% of cases present a co-infection with high-risk oncogenic types of HPV [4], making condyloma the first clinical marker of sub-acute infection by HPV18 [4].

HPV warts can cause a major physical, emotional, and psychosexual impact among affected patients. Currently, the most effective primary prevention method for condyloma are vaccines containing viral genotypes 6 and 11 (tetravalent and nonavalent vaccines), with highest efficacy when administered before the first sexual relationship [8-10]. The main risk factors are the number of sexual partners, early onset of sexual relationships, and being immunocompromised. Incubation period ranges between 3 weeks to 8 months, and the average time for lesions to appear after infection is 2 months. If left untreated, condyloma acuminata can resolve unaided, persist, or increase in number and/ or size. Transient immunodepression states, such as pregnancy, favour condyloma progression [6,8,11].

Currently, there is no consensus about how to manage HPV warts as none of the available treatments is fully efficacious and cannot be applied to all types of condyloma. Personalised treatment might offer a good clinical advantage, but many factors need to be taken into account such as the number and size of lesions, affected area, whether or not keratosis is present, the doctor or therapist’s personal experience, the potential treatment adherence, toxicity, side effects, prices, between others [8,9,11]. In the clinical case presented here, the combination of laser therapy with the locally administered vulvar Papilocare® external genital gel shown clinical efficacy eliminating HPV warts, without relapse 6 months after treatment.

References