Interdigital condylomata lata

Cristina Irene Vera[1], Alcira Bermejo[2], Viviana Leiro[2], Viviana Parra[3], Ariel Samper[4]

ABSTRACT

Condylomata lata are a frequent manifestation of secondary syphilis, not so their unusual location. Four patients with interdigital condylomata are presented as well as a review of the literature (Dermatol Argent 2010;16(3):199-203).

Key words:

syphilis, unusual manifestations, interdigital condylomata.

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ABBREVIATIONS

CL	Condyloma lata
ICL	Interdigital condyloma lata
Dils	Dilutions (laboratory test VDRL)
VDRL	Venereal Disease Research Laboratory
HIV	Human immunodeficiency virus
IS	Interdigital space
STI	Sexually transmitted infections

Introduction

Luetic secondary period is of great semiological wealth which tests the dermatologist diagnostic skills. In this stage of the disease lesions are called syphilids and when located at cutaneous or mucocutaneous folds they receive the name of condylomata lata (CL). Common sites of localization are the folds: the intergluteal, perianal and vulvar fold are the sites of preference.

The CL of unusual localization can be found at other fold like inframammary, axillar, auricular, interdigital and navel. In the presence of an interdigital CL a high degree of suspicion to reach the diagnosis is required, and to do the treatment during early stages and thus cut the epidemiological chain. Here, we report 4 patients with interdigital condylomata lata and a review of the present literature.

[1] Atending physician, Dermatology Unite, Hospital de Infecciosas "F. J. Muniz". CABA.

[2] Atending physician, ITS section, Dermatology Unit. Hospital de Infecciosas "F. J. Muniz". CABA.

[3] Dermatologist. Professor of dermatology at the University of Cuyo. Head of the Dermatology Unit, Hospital "Lagomaggiore". Mendoza.

[4] Attending Dermatologist, Central Hospital Mendoza. Mendoza.

Corresponding Author: Dra. Cristina Irene Vera: Av. Congreso 4732 12. A. CABA, Rep. Argentina. irenevera@gmail.com

Materials and Methods

Clinical case 1

Male patient, aged 24, presents a brown widespread maculopapular rash that includes palms and soles. In the oral mucosa syphilids are observed at soft palate **(Photo 1)** and CL are also seen at perineum and interdigitally **(Photo 2)** in almost all spaces of both feet. The CL are presented as white edged plaques with a central eroded depressed area, with a wet aspect. CL emits a sui generis odor. In addition, generalized lymphadenopathies were found.
Dark field: +. VDRL: 512 dil. VIH serology: not reactive.
Diagnosis: secondary syphilis.
Treatment: Benzathine penicillin 2,400,000 Units, 1 weekly dose until a total of 3 doses were completed.
Evolution: disappearance of intertrigo and other secondary manifestations. Decrease in the titles of VDRL required in the subsequent controls.

Clinical case 2

Female patient, 42 years old. Sexual contact of a patient with primary syphilis (typical chancre) referred to the consultation done in STI controls. Presents intertrigo on the 4th interdigital space of her left foot with an evolution of 3-months old, softened, not responding to topical antifungal treatment indicated by a dermatologist. Physical examination showed a whitish papule with slightly raised edges, moisten and emanating a peculiar odor **(Photo 3)**.
She also presented widespread lymphadenopathies.
Dark field: +. VDRL: 512 dils. HIV Serology: not reactive.
Sole secondary cutaneous manifestation: macerated intertrigo.
Treatment: Benzathine penicillin 2,400,000 U, 1 weekly dose until a total of 3 doses were completed.
Evolution: disappearance of intertrigo **(Photo 4)** and decrease in the titles of VDRL required in the subsequent controls.

Clinical Case 3

Female patient aged 17, prostitute. Presents in the anal and genital area and the 3rd interdigital space of the right foot white wet papules. The intertriginous lesion is erosive, moist, softened and fetid, with a greyish-white center **(Photo 5)**.
Dark field: +. VDRL: 512 dils. HIV serology: non reactive.
Treatment: Benzathine penicillin 2,400,000 U, 1 weekly dose until a total of 3 doses were completed.
Evolution: disappearance of intertrigo and decrease in the titles of VDRL required in the subsequent controls.

Clinical Case 4

Male patient aged 58, who consulted for a two weeks duration dripping wet injury located in the 4th interdigital space of the left foot, covered by yellowish-white secretion.

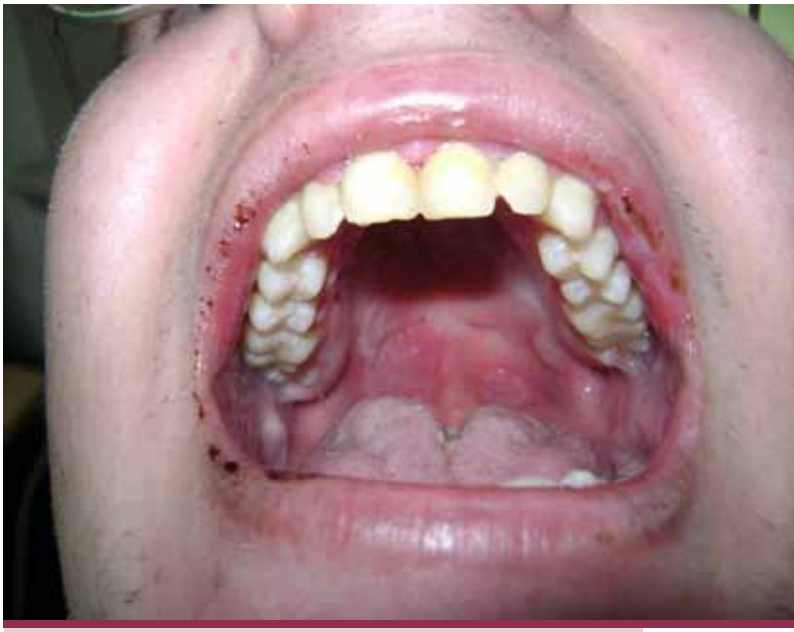


PHOTO 1. Case 1. Syphilids in the soft palate

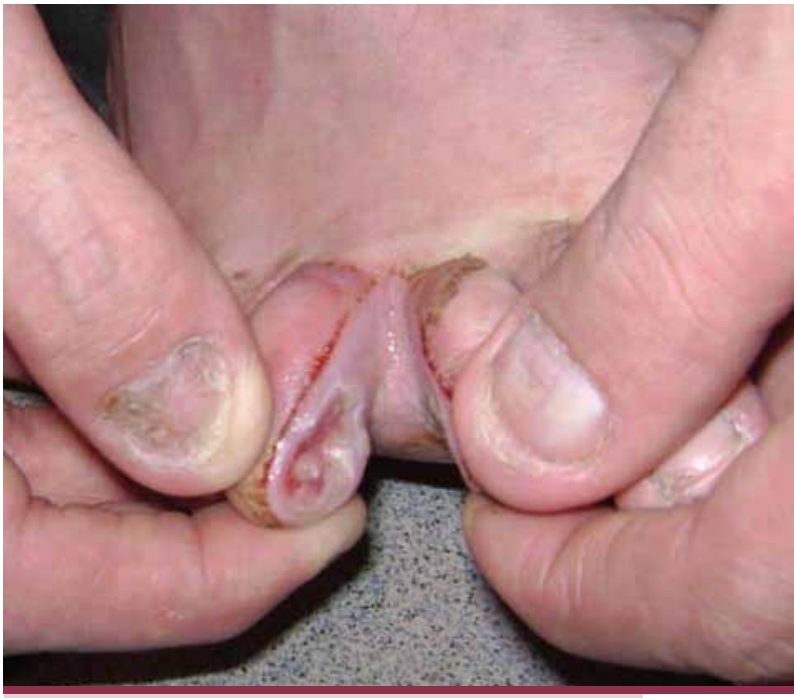


PHOTO 2. Case 1. Interdigital condyloma lata

(Photo 6). On physical examination, perianal condylomata and generalized adenopathies are detected. The rest of the tegument and mucous remained unaffected. Likely history of chancre 3 months prior to the current injury (patient evaluated by Dr. Samper, Central Hospital of Mendoza).
Dark background: +. VDRL: 128 dils. HIV serology: non reactive.

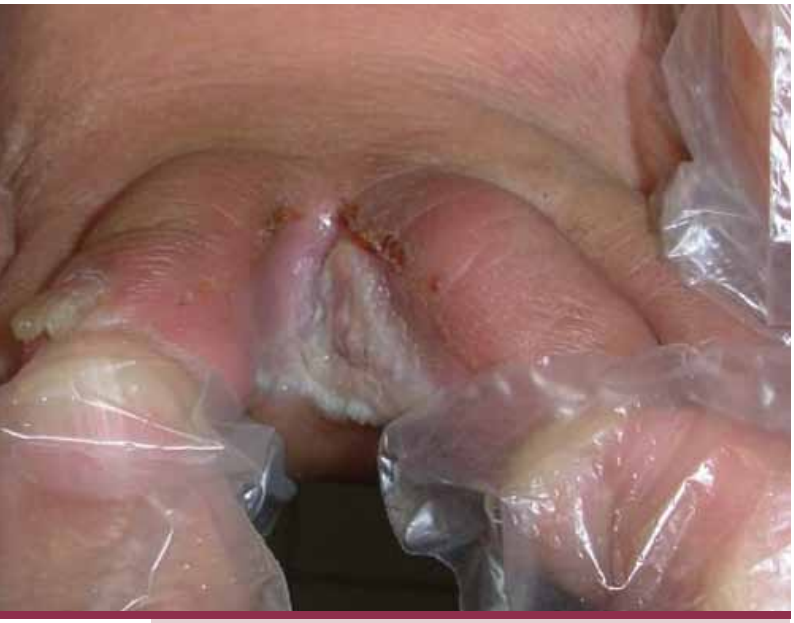


PHOTO 3. Case 2. Intertrigo on the 4th interdigital space of left foot shows a whitish papule with slightly raised edges.

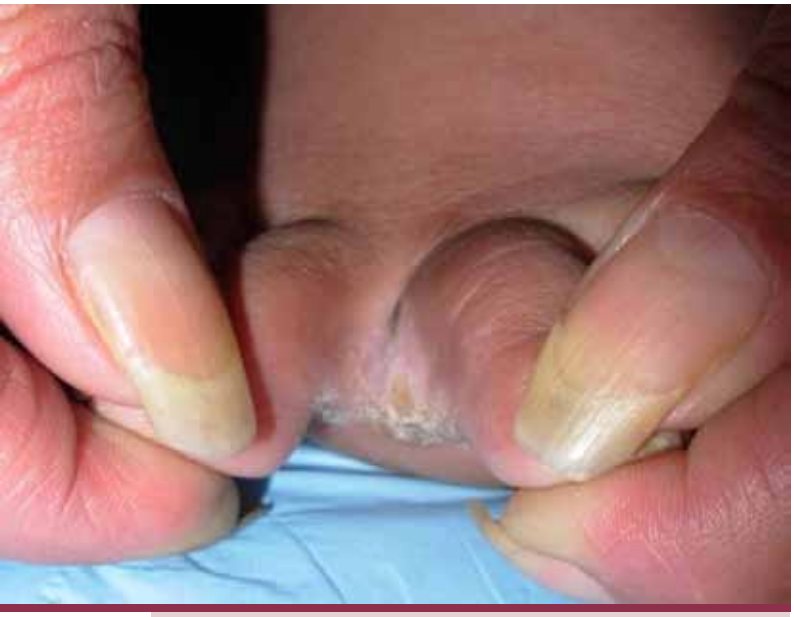


PHOTO 4. Case 2. Disappearance of intertrigo after treatment.

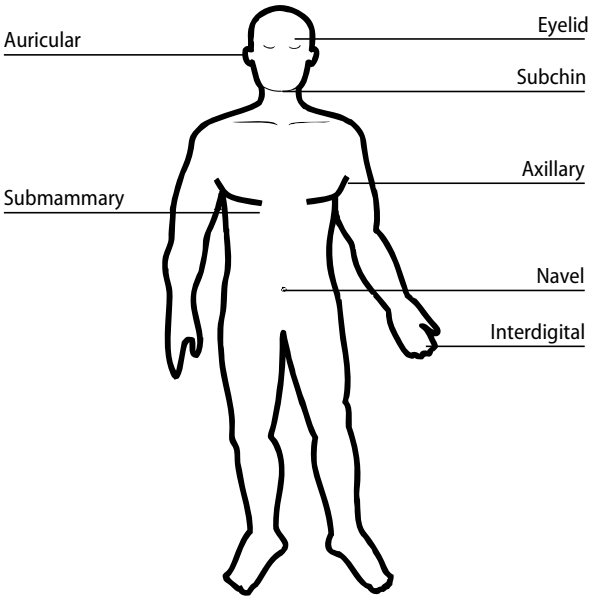
Treatment: Benzathine penicillin 2,400,000 U, 1 weekly dose until a total of 3 doses were completed.
Evolution: the case was resolved within 10 days.

Comments

Secondary cutaneous lesions are denominated syphilids and represent inflammatory tissue reactions in response to the accumulation of metastatic treponemes.
When located on cutaneous or mucocutaneous folds they are called condylomata lata (CL).

CLs constitute true *in vivo* cultures of treponemes1 and appear in accordance with the descriptions found in the literature in 10% cases of secondary syphilis.[2]
CLs are hypertrophic papules, usually multiple, asymptomatic, and of different sizes, which can come together. They have a wet appearance, usually of white color, which can be eroded or softened and exude a distinctive odor, *sui generis*.
According to the evolution in time, lesions as the previously described or larger can be seen as vegetating plaques, covered with whitish-gray exudates. The clinical features vary according to time and moisture conditions, friction and hygiene, among other causes. This *sui generis* odor, treponemal odor, is so striking and unique that the mere perception during a physical examination suggests towards the search for exudative lesions that produce and evokes Luetic diagnosis. Young dermatologists should be trained in its recognition.
CLs are usually located in moist areas or major cutaneous or mucocutaneous folds; the most common are: intergluteal, perianal, vulvar, scrotum and groin.[3]
Less frequently they can found on the ear,[4] subchin area,[5] neck,[5] lid,[6] axillar fold,[5] thighs, inframammary fold, nasolabial, navel, lip corners, among others cited by Minkin et al.[7] **(Figure 1)**.
Regardless of location, the CLs are always infective lesions of excellence acquired syphilis; thus early diagnosis not only helps an early cure but also delimits the chain of infection.
In the Muñiz Hospital in the ITS sector, we treated 311 cases of secondary syphilis between January 2006 and December 2008. We observed the interdigital CL in only 3 patients (0.96%, Cases 1 to 3), in contrast to the presence usual CL in other locations, for which we believe, based on our experience, that this is an unusual manifestation.
We have repeatedly observed how the semiotics of presentation of syphilids evokes characteristics features of an individual's skin diathesis. For example, psoriasiform elements in a patient with previously acquired psoriasis, or acneiform syphilids in a seborrheic patient. We believe that in cases of CL located in folds, local factors also affect its appearance. We found hyperhidrosis among our patients, history of previous fungal intertrigo and lack of hygiene, also reported by other authors.[8-10]
According to this remark, it is interesting to point out in the article of El Saad et al. the presence of interdigital CL in hands on a patient with hyperhidrosis.[8] Rosen et al. postulate joint feet infection by fungi and gram-negative bacteria.[11]
Perhaps occluded small folds, highly humid, are the substrate on which the treponema can easily develop. For an organism whose lack of enzymes such as catalase and oxidase makes it vulnerable to oxidative stress,[2] this microclimate with decreased oxygen tension is the ideal site for replication.
We conducted a comprehensive literature search from 1940 to date, and selected only those cases describing interdigital

FIGURE 1. Unusual locations of CL.[4,5]



condylomata lata. A patient with primary chancre[12] and those who had incomplete demographic data were excluded.[9,12]

18 cases were included **(Table 1)** in addition to our four patients in total, 13 (60%) of which were male and 9 (40%) female.[7,9-14] CL was observed to show a predilection for the 3rd and 4th interdigital space (IS).

Affectation of an insolated interdigital space counted areas for 50%. 41% of patients had 2 or more affected IS and affection of all IS was observed only in 2 cases (9%),[10] one of which belongs to our series of cases.

82% of patients had, besides the interdigital CL, other secondarism skin lesion. Only in 4 patients (12%) CL was the solely manifestation of the disease,[10,11,14] one of theem presented by us. Before this eventuality, the level of suspicion of the attending dermatologist should be really high.

Quantitative VDRL titles seem to have no influence over this events.

The dark field analysis results very useful, and positive in almost all cases due to the large amount of treponemes present in the lesions.

Histological analysis performed in a case of interdigital CL[9] showed a psoriasiform epidermal pattern, and a dense diffuse inflammatory infiltrate in dermis with predominant perivascular plasma cells; we do not think this practice is it needed, except for academic purposes.

Finally, it is important to emphasize while making the diagnosis of syphilis is also necessary to investigate a possible co-infection with HIV. Although the association was negative in all 4 studied patients, is it to be remembered that secondary syphilis is often the reason of consultation that elicit us to reach the diagnosis of HIV in a pre-AIDS stage[15].

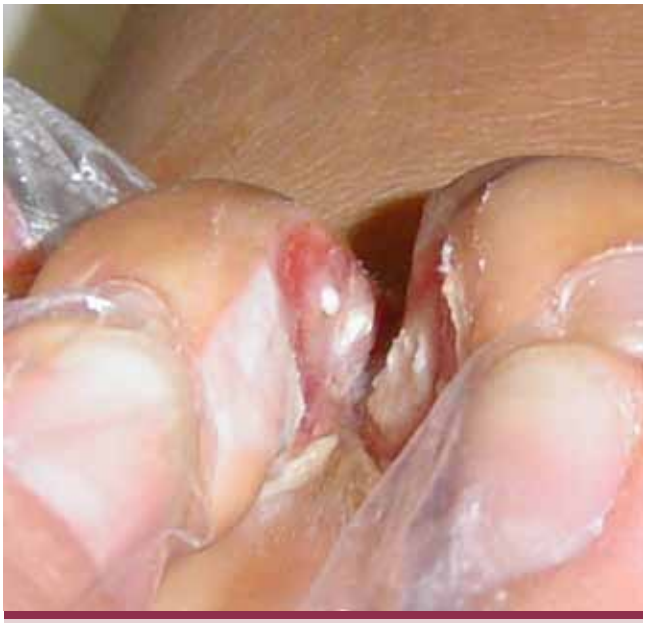


PHOTO 5. Case 3. Erosive intertriginous lesions, moist, softened and fetid, with greyish-white center area.

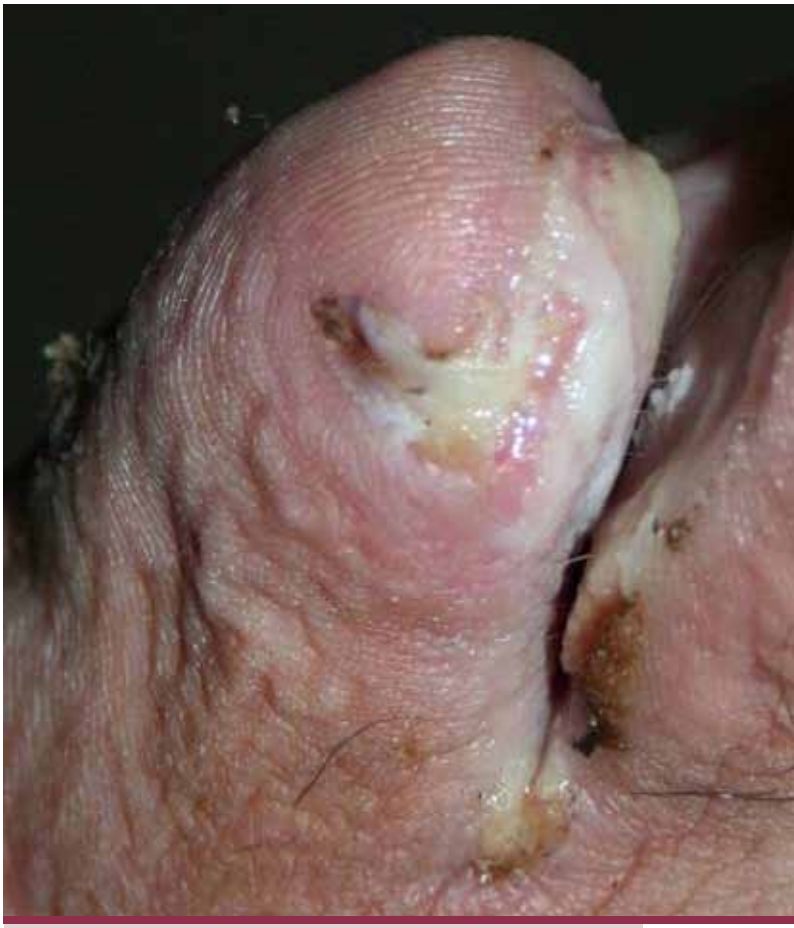


PHOTO 6. Case 4. Injury dripping wet on in the 4th interdigital space, covered by a yellowish-white exudate, after two weeks later of evolution.

TABLE 1. Review of 18 patients with interdigital condyloma lata in the literature.

Epidemiological data	Nº of ICL	Manifestations of secondarism (others)	Interdigital space	Year of publication/author
Man 28	> 2	Yes	Nonspecific	1951 / Dexter
Man 39	1	Yes	4to	1951 / Dexter
Woman 22	1	Yes	3ero	1951 / Dexter
Woman 24	2	Yes	4to	1951 / Dexter
Man 28	> 2	Yes	4to	1951 / Dexter
Woman 19	1	Yes	4to	1951 / Dexter
Woman 23	1	Yes	4to	1951 / Dexter
Woman 23	1	Yes	3ero	1951 / Dexter
Woman 22	1	Yes	4to	1951 / Dexter
Woman 16	1	Yes	3ero	1951 / Dexter
Man 25	1	No	3ero	1967 / Minkin
Man 28	> 2	Yes	1ero-4to	1984 / Subhash
Man 47	1	No	4to	1996 / Templeton
Man 47	2	Yes	3ero-4to	1996 / Templeton
Man 42	> 2	No	3ero-4to	2001 / Rosen
Man 60	> 2	Yes	Nonspecific	1986 / Arpini
Man 34	> 2	Yes	Nonspecific	1940 / Thomas
Man 26	> 2	yes	Nonspecific	1940 / Thomas

ICL: interdigital condyloma lata

Conclusions

The interdigital CL of the feet are one of the many presentations of Luetic secondarism. These lesions may be the only cutaneous manifestation of the disease or may coexist with syphilides on elsewhere. Therefore, a high degree of suspicion and a dark field analysis can be helpful as well as conducting a serum VDRL test to confirm the diagnosis, especially in atypical intertrigo which do not respond to the usual treatments. We emphasize the importance of a thorough physical examination of patients with ITS and their sexual contacts.

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