esthetic outcome, but would also prevent collapse with inspiration. This could be overcome by adding a free cartilage graft from the concha of auricle[5,6] or a titanium mesh,[5] although such procedures were considered unnecessary in this case given the age of the patient. Other reconstruction options requiring a single intervention are nasolabial transposition flap or subcutaneous turnover pedicle,[1,7] but these are not useful in this case because the surgical defect would include this region.

Reconstructive surgery was performed in a single intervention of the nasal ala and perialar region, using a malar turnover island pedicle flap. The functional and esthetic outcomes were good. This technique is a very useful tool for the reconstruction of large defects in the nasal ala with involvement of the nasolabial fold, which rules out use of this structure for the flap design.

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# Detection of *Chlamydia trachomatis* Infection in Patients Seen at a Sexually Transmitted Infection Clinic☆



## Detección de la infección por *Chlamydia Trachomatis* en pacientes que consultan por una infección bacteriana de transmisión sexual

*To the Editor:*

Chlamydia is the most common bacterial infection transmitted sexually in Europe and it is particularly common in young people. According to the World Health Organization, 10% of sexually active people under 25 years of age may be infected.[1] Chlamydia can affect both men and women, but complications are more common in women. Based on official data from the European Center for Disease Prevention and Control,[2] certain socioeconomic statuses and sexual behaviors are associated with increased vulnerability to sexually transmitted infections (STIs).[3]

According to studies of different populations in Europe, the estimated prevalence of *Chlamydia trachomatis* infection, or chlamydia, is between 4% and 6%.[4,5,6] Up to 70% of infections in women are asymptomatic,[7] and chlamydia increases the risk of infection by the human immunodeficiency virus and other STIs, such as gonorrhea.[8] Notification of individual cases of genital chlamydial infection is not a requirement in Spain, where epidemiological surveillance is organized through the Microbiological Information System. In Catalonia, where our hospital is based, the number of cases of genital chlamydia must now be reported, a requirement that led to a 29% increase in the number of cases reported between 2011 and 2012.[9]

We performed a prospective descriptive study of the frequency of chlamydia in patients seeking treatment for a suspected STI at the STI unit of Hospital Universitario Arnau de Vilanova in Lleida between November 2012 and November 2013. All patients were asked if they wished to participate in the study and those who agreed signed an informed consent form.

During the visit, apart from history taking and tests relevant to the patient's presenting condition, each patient was asked if they would provide samples (urethral for men and cervical for women) to test for chlamydia. The detection methods used were the polymerase chain reaction nucleic acid test (Anyplex CT/NG Real-time Detection, Seegene) and immunochromographic antigen detection. Patients diagnosed with *C trachomatis* infection were given cards to pass onto their sexual contacts to come in for evaluation.

Information on the study variables was collected in face-to-face interviews with the patients (Table 1). The prevalence of chlamydial infection in the subgroups analyzed was calculated with 95% CIs. Associations between the dependent variable (chlamydia) and the main independent variables were assessed by odds ratios and 95% CIs.

In total, 107 patients (68.2% men) were included in the study. Most (71.1%) had secondary or university studies. Almost 40% of the patients were aged between 26 and 35 years, 58.9% stated that they did not generally use contraception methods, and 5.6% reported working as a sex worker.

**Table 1** Characteristics of Patients Seen for a Suspected STI at the Dermatology Unit of Hospital Universitario Arnau de Vilanova de Lleida Between November 2012 and November 2013.

| Variable | Category | No. of Patients | | 95% CI |
|---|---|---|---|---|
| | | (n = 107) | % | |
| Sex | Male | 73 | 68.2 | (59.4-77.0) |
| | Female | 34 | 31.8 | (23.0-40.6) |
| Age group, y | 16-25 | 39 | 36.4 | (27.3-45.6) |
| | 26-35 | 42 | 39.3 | (30.0-48.5) |
| | > 35 | 26 | 24.3 | (16.2-32.4) |
| Education | None or primary | 20 | 18.7 | (11.3-26.1) |
| | Secondary | 45 | 42.1 | (32.7-51.4) |
| | University | 31 | 29.0 | (20.4-37.6) |
| | Vocational training | 11 | 10.3 | (4.5-16.0) |
| Stable partner | No | 37 | 34.6 | (25.6-43.6) |
| | Yes | 70 | 65.4 | (56.4-74.4) |
| Sexual partners, No./mo | 0-1 | 94 | 87.9 | (81.7-94.0) |
| | > 1 | 13 | 12.1 | (6.0-18.3) |
| Sexual partners. No./y | 0-1 | 51 | 47.7 | (38.2-57.1) |
| | 2-3 | 34 | 31.8 | (23.0-40.6) |
| | > 3 | 20 | 18.7 | (11.3-26.1) |
| Sexual orientation | Heterosexual | 97 | 90.7 | (85.1-96.2) |
| | Homosexual | 10 | 9.3 | (3.8-14.9) |
| Use of condom during last sexual contact | No | 64 | 59.8 | (50.5-69.1) |
| | Yes | 43 | 40.2 | (30.9-49.5) |
| Use of barrier methods | No | 63 | 58.9 | (49.6-68.2) |
| | Yes | 44 | 41.1 | (31.8-50.4) |
| Sex worker | No | 101 | 94.4 | (90.0-98.8) |
| | Yes | 6 | 5.6 | (1.2-10.0) |
| Time since onset of symptoms, mo | < 1 | 19 | 17.8 | (10.5-25.0) |
| | 1-6 | 61 | 57.0 | (47.6-66.4) |
| | > 6 | 21 | 19.6 | (12.1-27.2) |
| | Asymptomatic | 6 | 5.6 | (1.2-10.0) |
| PCR | Negative | 97 | 90.7 | (85.1-96.2) |
| | Positive | 10 | 9.3 | (3.8-14.9) |
| Patient as possible origin of infection | No | 50 | 46.7 | (37.3-56.2) |
| | Yes | 57 | 53.3 | (43.8-62.7) |
| Other STIs | No | 30 | 28.0 | (19.5-36.5) |
| | Gonorrhea | 3 | 2.8 | (−0.3-5.9) |
| | Syphilis | 3 | 2.8 | (−0.3-5.9) |
| | Genital warts | 51 | 47.7 | (38.2-57.1) |
| | Other | 20 | 18.7 | (11.3-26.1) |
| Identification of contact | No | 54 | 50.5 | (41.0-59.9) |
| | Yes | 53 | 49.5 | (40.1-59.0) |
| Postinfection contacts, No. | 0 | 48 | 44.9 | (35.4-54.3) |
| | 1 | 50 | 46.7 | (37.3-56.2) |
| | > 1 | 9 | 8.4 | (3.2-13.7) |
| Contacts that could be located, No. | 0 | 52 | 48.6 | (39.1-58.1) |
| | 1 | 44 | 41.1 | (31.8-50.4) |
| | 2 | 11 | 10.3 | (4.5-16.0) |

Abbreviations: PCR, polymerase chain reaction; STI, sexually transmitted infection.

Genital warts were the most common presenting complaint, present in 47.7% of patients.

The prevalence of chlamydia was 9.3% (10 of 107 patients; 95% CI, 3.8-14.9). This rate provides additional strength to guideline recommendations to screen for *C trachomatis* infection in all patients seeking treatment for a suspected STI. The odds of being infected was 11.1 times higher (95% CI, 3.4-72.4) in patients who reported having had 2 sexual partners (compared with 1 or none) in the previous month and 5.3 times higher (95% CI, 0.9-31.7) in patients with 3 or more sexual partners (also compared with 1 or none) in the past year. The odds of infection was also higher in homosexual patients (OR, 5.5; 95% CI, 1.2-26.1), in patients who reported working as sex workers (OR, 5.7;

**Table 2** Factors Associated With *Chlamydia trachomatis* in Patients Seen for a Suspected STI at the Dermatology Unit of Hospital Universitario Arnau de Vilanova de Lleida Between November 2012 and November 2013.

| Variable | Category | Total No. of Patients | Chlamydia | | P Value[a] | OR; 95% CI |
| --- | --- | --- | --- | --- | --- | --- |
| | | | No. of Patients With Chlamydia | % of Patients With Chlamydia | | |
| Overall | | 107 | 10 | 9.3 | | |
| Sex | Male | 73 | 8 | 11.0 | .326 | 1.0 |
| | Female | 34 | 2 | 5.9 | | 0.5; 0.1-2.6 |
| Age group, y | 16-25 | 39 | 3 | 7.7 | .472 | 2.1; 0.2-21.2 |
| | 26-35 | 42 | 6 | 14.3 | .168 | 4.2; 0.5-36.7 |
| | > 35 | 26 | 1 | 3.8 | | |
| Education | None or primary | 20 | 3 | 15.0 | .262 | 2.5; 0.4-13.5 |
| | Secondary | 45 | 3 | 6.7 | | 1.0 |
| | University | 31 | 3 | 9.7 | .472 | 1.5; 0.3-8.0 |
| | Vocational training | 11 | 1 | 9.1 | .594 | 1.4; 0.1-14.9 |
| Stable partner | No | 37 | 4 | 10.8 | .476 | 1.3; 0.3-4.9 |
| | Yes | 70 | 6 | 8.6 | | 1.0 |
| Sexual partners in last month, No. | 0-1 | 94 | 5 | 5.3 | | 1.0 |
| | > 1 | 13 | 5 | 38.5 | .002[b] | 11.1; 3.4-72.4 |
| Sexual partners, No./y | 0-1 | 50 | 2 | 4.0 | | 1.0 |
| | 2-3 | 34 | 4 | 11.8 | .177 | 3.2; 0.5-18.5 |
| | > 3 | 22 | 4 | 18.2 | .066 | 5.3; 0.9-31.7 |
| Sexual orientation | Heterosexual | 97 | 7 | 7.2 | | 1.0 |
| | Homosexual | 10 | 3 | 30.0 | .028[b] | 5.5; 1.2-26.1 |
| Use of condom during last sexual contact | No | 64 | 6 | 9.4 | | 1.0 |
| | Yes | 43 | 4 | 9.3 | .522 | 0.8; 0.2-3.1 |
| Use of barrier methods | No | 63 | 6 | 9.5 | | 1.0 |
| | Yes | 44 | 4 | 9.1 | .493 | 0.8; 0.2-3.0 |
| Sex worker | No | 101 | 8 | 7.9 | | 1.0 |
| | Yes | 6 | 2 | 33.3 | .099 | 5.7; 0.9-36.0 |
| Onset of symptoms, mo | < 1 | 19 | 2 | 10.5 | .461 | 2.3; 0.2-28.3 |
| | 1-6 | 61 | 6 | 9.8 | .421 | 2.2; 0.2-19.3 |
| | > 6 | 21 | 1 | 4.8 | | 1.0 |
| | Asymptomatic | 6 | 1 | 16.7 | .401 | 4.0; 0.2-75.6 |
| Patient as possible origin of infection | No | 50 | 6 | 12.0 | .282 | 1.5; 0.4-5.8 |
| | Yes | 57 | 4 | 7.0 | | 1.0 |
| Other STIs | No | 30 | 3 | 10.0 | .262 | 2.7; 0.4-13.7 |
| | Gonorrhea | 3 | 2 | 66.7 | .012[b] | 49.0; 3.0-794.4 |
| | Syphilis | 3 | 1 | 33.3 | .160 | 12.2; 0.8-198.6 |
| | Genital warts | 51 | 2 | 3.9 | | 1.0 |
| | Others | 20 | 1 | 5.0 | .635 | 1.3; 0.1-15.1 |
| Identification of contact | No | 54 | 6 | 11.1 | .383 | 1.5; 0.4-5.8 |
| | Yes | 53 | 4 | 7.5 | | 1.0 |
| Postinfection contacts, No. | 0 | 48 | 4 | 8.3 | | 1.0 |
| | 1 | 50 | 4 | 8.0 | .619 | 1.0; 0.2-4.1 |
| | > 1 | 9 | 2 | 22.2 | .237 | 3.1; 0.5-20.5 |
| Contacts that could be located, No. | 0 | 52 | 4 | 7.7 | | 1.0 |
| | 1 | 44 | 4 | 9.1 | .545 | 1.2; 0.3-5.1 |
| | > 1 | 11 | 2 | 18.2 | .279 | 2.7; 0.4-16.8 |

Abbreviation: STI, sexually transmitted infection.
[a] Fisher exact test.
[b] Statistically significant (*P* <.05).

95% CI, 0.9-36), and in patients with gonorrhea (OR, 49; 95% CI, 3.0-794.4); 66.7% of all the patients with gonorrhea had chlamydia. Associations between *C trachomatis* infection and the other study variables (Table 2) could not be determined due to insufficient statistical power.

Our study has certain limitations. Because information on sexual orientation, sexual habits, and sexual partners was collected during patient interviews, its reliability may be questionable. Nevertheless, all interviews were conducted by trained STI experts in an appropriate, confidential setting. While the detection techniques used were highly sensitive and specific, it should be noted that results may vary according to the quality of the biological sample. Finally, we studied a relatively small sample of patients, and consequently the study was not sufficiently powered to detect certain risk factors. Small samples can also result in imprecise estimates with wide confidence intervals. Notwithstanding, despite the limited size of the sample analyzed, we found 2 risk factors significantly associated with chlamydial infection that have been reported in numerous studies,[5,8,10] namely, number of sexual partners in the previous month and homosexual relationships.

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# Koebner Phenomenon in a Patient With Lichen Sclerosus Following a Jellyfish Sting: An Exceptional Morphology☆

## Fenómeno de Koebner en un liquen escleroso tras una picadura de medusa: una morfología excepcional

Lichen sclerosus is a chronic inflammatory disease that has a particular affinity for the anogenital region. Only 6% of patients present solitary extragenital lesions, although this percentage can rise to 15% during childhood.[1]

We present the case of a patient with lichen sclerosus lesions following a jellyfish sting in the context of Koebner phenomenon.[2]

The patient was a 13-year-old girl with an unremarkable family history who consulted for a whitish, atrophic, and pruriginous plaque on the vulva and gluteal cleft, together with whitish indurated papules spread throughout the trunk. A skin biopsy revealed orthokeratotic hyperkeratosis in the epidermis, with hydropic degeneration and atrophy of the basal layer, in addition to edema and homogenization of collagen. The patient was treated with topical tacrolimus and her lesion improved considerably after 4 months. One year later, while asymptomatic, she was stung by a jellyfish. Papules and plaques appeared in a linear pattern (17 cm long) on the right abdomen. These were clinically compatible with lichen sclerosus lesions (Fig. 1A) and very probably originated as a result of Koebner phenomenon (Fig. 1B). The