



UvA-DARE (Digital Academic Repository)

Lymphogranuloma venereum: the Italian experience

Cusini, M.; Boneschi, V.; Arancio, L.; Ramoni, S.; Venegoni, L.; Gaiani, F.; de Vries, H.J.C.

DOI

[10.1136/sti.2008.032862](https://doi.org/10.1136/sti.2008.032862)

Publication date

2009

Document Version

Final published version

Published in

Sexually Transmitted Infections

[Link to publication](#)

Citation for published version (APA):

Cusini, M., Boneschi, V., Arancio, L., Ramoni, S., Venegoni, L., Gaiani, F., & de Vries, H. J. C. (2009). Lymphogranuloma venereum: the Italian experience. *Sexually Transmitted Infections*, 85(3), 171-172. <https://doi.org/10.1136/sti.2008.032862>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



Lymphogranuloma venereum: the Italian experience

M Cusini, V Boneschi, L Arancio, et al.

Sex Transm Infect 2009 85: 171-172 originally published online November 26, 2008

doi: 10.1136/sti.2008.032862

Updated information and services can be found at:

<http://sti.bmj.com/content/85/3/171.full.html>

These include:

References

This article cites 9 articles, 2 of which can be accessed free at:

<http://sti.bmj.com/content/85/3/171.full.html#ref-list-1>

Article cited in:

<http://sti.bmj.com/content/85/3/171.full.html#related-urls>

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic collections

Articles on similar topics can be found in the following collections

[Ophthalmology](#) (13017 articles)

[Chlamydia](#) (278 articles)

Notes

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://journals.bmj.com/cgi/ep>

Lymphogranuloma venereum: the Italian experience

M Cusini,¹ V Boneschi,¹ L Arancio,¹ S Ramoni,¹ L Venegoni,¹ F Gaiani,¹ H J C de Vries²

See Editorial, p 157

¹ Institute of Dermatological Sciences, University of Milan, Fondazione IRCCS Ospedale Maggiore Policlinico, Mangiagalli E Regina Elena, Milan, Italy;

² Department of Dermatology, Academic Medical Centre, University of Amsterdam and STI Outpatient Clinic, Infectious Diseases Cluster, Health Service Amsterdam, Amsterdam, The Netherlands

Correspondence to: Dr M Cusini, Institute of Dermatological Sciences, University of Milan, Via Pace 9, 20122, Milano, Italy; m.cusini@policlinico.mi.it

Accepted 13 November 2008
Published Online First
26 November 2008

ABSTRACT

An epidemic of lymphogranuloma venereum (LGV) has been described in men who have sex with men (MSM) in the western world, particularly in western Europe. The first Italian case was reported by the authors in 2006, and up to March 2008 there have been 13 symptomatic cases, all in MSM. Ten cases had LGV proctitis and three cases had inguinal adenopathy as their clinical presentation. The initial three cases reported receptive anal intercourse in metropolitan areas of northern Europe, Turkey and eastern Europe, whereas the later cases were infections acquired locally. Diagnosis was by LGV-specific real-time PCR in nine cases, by symptoms and PCR for *Chlamydia trachomatis* in three cases, and in one case clinically and epidemiologically.

Only sporadic imported cases of lymphogranuloma venereum (LGV) were reported in Europe and North America until 2004, when a new epidemic of LGV, presenting with erosive proctitis, was reported from Rotterdam, The Netherlands,¹ affecting men who have sex with men (MSM).²

Chlamydia trachomatis LGV serovars cause a severe inflammation with invasion of the submucosal tissue and of the lymphatic system. The anogenito-rectal syndrome is characterised by proctocolitis and hyperplasia of the intestinal lymphatic tissue. Complications, such as local abscesses and rectal strictures or stenoses, are reported.³

We observed the first Italian case at the Sexually Transmitted Disease (STD) Centre of Milan in March 2006.⁴ Up to March 2008 we collected a series of 10 patients and three more cases were observed during 2007 in Florence.

We describe the main epidemiological and clinical features of our series.

METHODS

The study design was a descriptive case series. The patients were MSM attendees of two STD centres in Milan and Florence with signs of proctitis and/or genital ulcerative disease, or inguinal syndrome.

Screening culture for gonorrhoea, nucleic acid amplification tests for urogenital chlamydia, syphilis serology and HIV tests in HIV-negative patients were performed. Ulcer swabs were tested with nucleic acid amplification tests for herpes simplex virus⁵ and *Treponema pallidum*.⁶

C trachomatis was first diagnosed by a commercial kit with reverse transcriptase PCR after cell lysis. We used the *C trachomatis* 16S-real time test (ref AA842; Nuclear Laser Medicine srl, Milan, Italy). This kit provides reagents for contemporaneous amplification and detection of 360 bp 16S rRNA gene and a 154 bp internal control, which is a human sequence codifying factor V through "real time" PCR.

Table 1 Case series: clinical, epidemiological and laboratory features

Patient	Positive PCR	Sexual contacts abroad	Clinical signs	HIV infection	HAART	CD4 cells/ml	STI history	No of partners in past 6 months	LGV diagnosis
1 Milan	Anal swab	Northern Europe	Anal discharge, rectal erosion	No	No	nd	Negative	10	PCR L2
2 Milan	Inguinal aspirate	Only Italy	Inguinal abscess (right and left)	No	No	nd	Negative	Unknown	CT serology
3 Milan	Penile swab	Unknown	Penile chancre and inguinal abscess (left)	No	No	nd	Negative	3	PCR L2
4 Milan	Perianal swab	Unknown	Perianal erosion	Yes	Yes	nd	Syphilis I	10	PCR L2
5 Milan	Anal swab	Unknown	Anal discharge and anal erosions	Yes	Yes	300	Negative	3	PCR L2
6 Milan	Perianal swab	Turkey	Anal discharge and perianal erosions	Yes	Yes	n.d.	Genital warts	Unknown	PCR L2
7 Milan	Penile swab	Unknown	Nodular erosive lesion	Yes	Yes	nd	Genital warts	Unknown	PCR L2
8 Milan	Penile swab	Unknown	Nodular erosive lesion	No	No	nd	Syphilis late latent	30	PCR L2
9 Milan	Anal swab	Ukraine	Anal discharge and rectal erosion	Yes	No	600	Syphilis I	1	PCR L2
10 Milan	Anal and perianal swab	Only Italy	Anal discharge and perianal erosion	Yes	No	n.d.	Syphilis II	2	PCR L2
11 Florence	Anal swab	Unknown	Anal discharge and rectal erosion	Yes	Yes	500	Hepatitis B, gonorrhoea	6	PCR
12 Florence	Anal swab	Only Italy	Anal discharge	Yes	Yes	500	Syphilis II, gonorrhoea	2	PCR
13 Florence	Anal swab	Only Italy	Anal discharge	No	No	nd	Syphilis II	4	PCR

CT, *C trachomatis*; HAART, highly active antiretroviral therapy; LGV, lymphogranuloma venereum; L2, identification done in Amsterdam; nd, not done; STI, sexually transmitted infection.

Clinical

For the Milanese samples, identification of LGV serovars was conducted in Amsterdam, and for the Florentine samples in the microbiology laboratory of Azienda Ospedaliera Universitaria Careggi Firenze, as described before.⁷

Chlamydia serology was performed by ELISA according to the manufacturer's protocol (NovaLisa IgG ELISA; NovaTec Immundiagnostica GmbH, Dietzenbach, Germany).

RESULTS

From March 2006 to December 2007, 13 patients with LGV were diagnosed (table 1).

In 10 cases *C trachomatis* was detected from rectal or perianal swabs and in two cases from ulcerative lesions on the genitalia. In nine cases from Milan positivity for LGV *C trachomatis* was confirmed in Amsterdam. In one case the diagnosis was based on the history (LGV proctitis in partner), clinical symptoms (inguinal adenopathy) and *C trachomatis* serology positive at high titres.

All patients reported sex with men only: unprotected receptive anal intercourse was reported by two patients, whereas the inguinal LGV cases reported unprotected insertive anal sex. The rest of the patients reported protected receptive anal intercourse.

One patient had sexual contact in continental Europe, one in Turkey and one in eastern Europe.

Eight patients were HIV positive; the others were and remained seronegative during follow-up (3–6 months).

Concurrent sexually transmitted infections (STI) were found in five cases: two with external genital warts, one with primary syphilis and two with secondary syphilis. In eight patients one or more previous STI were recorded in the clinic files.

All patients attended regular follow-up for at least 6 months; two developed primary syphilis, one gonococcal urethritis and one external genital warts.

DISCUSSION

We report 13 cases of LGV in northern Italy over a period of 21 months. All were symptomatic, but three had inguinal adenopathy only. All patients were treated with doxycycline 100 mg twice a day for 21 days with complete response.

Asymptomatic LGV has been reported, posing the question of the need to introduce anal *C trachomatis* screening as a routine in MSM. In addition, the inguinal presentation highlights the need to screen for LGV in all cases of genital ulcers.⁸

In our series, HIV seropositivity was only 62%, which is lower than in other reported series in which up to 82% of cases were HIV positive.^{9–10}

The fact that eight of our 13 LGV patients presented in the following 6 months with another STI indicates continuing risk behaviour. They received specific counselling following their initial diagnosis, and the ineffectiveness of this, even in the short term, highlights the need for more effective intervention in this group. On an individual basis, routine rescreening and counselling for their cases should be considered. On a population basis, more public health initiatives and media awareness are required to highlight the ongoing risks of infection in all sections of the community.

Competing interests: None.

REFERENCES

1. **Van de Laar MJ**, Koedijk FD, Gotz HM, *et al*. A slow epidemic of LGV in the Netherlands in 2004 and 2005. *Euro Surveill* 2006;**11**:150–2.
2. **Centres for Disease Control and Prevention (CDC)**. Lymphogranuloma venereum among men who have sex with men—Netherlands, 2003–2004. *MMWR Morb Mortal Wkly Rep* 2004;**53**:985–8.
3. **Perrine PL**, Stamm WE. Lymphogranuloma venereum. In: Holmes KK, Sparling PF, Mardh PA, *et al*, eds. *Sexually transmitted disease*. New York: McGraw-Hill, 1999:423–32.
4. **Cusini M**, Boneschi V, Tanzi C, *et al*. Ano-rectal lymphogranuloma venereum: the first case in Italy. *G Ital Dermatol Venereol* 2008;**143**:83–5.
5. **Lucotte G**, Bathelier C, Lespiau V, *et al*. Detection and genotyping of herpes simplex virus type 1 and 2 by polymerase chain reaction. *Mol Cell Probes* 1995;**9**:287–90.
6. **Alessi E**, Ghislanzoni M, Scioccati L, *et al*. PCR: a useful adjunct to the diagnosis of syphilis. Technical note preliminary results. *G Ital Dermatol Venereol* 2004;**139**:75–80.
7. **Moré SA**, Spaargaren J, Fennema JSA, *et al*. Real-time polymerase chain reaction to diagnose lymphogranuloma venereum. *Emerg Infect Dis* 2005;**11**:1311–12.
8. **McMillan A**, van Voorst Vader PC, de Vries HJ. The 2007 European Guideline (International Union against Sexually Transmitted Infections/World Health Organization) on the management of proctitis, proctocolitis and enteritis caused by sexually transmissible pathogens. *Int J STD AIDS* 2007;**18**:514–20.
9. **Ward H**, Martin I, Macdonald N, *et al*. Lymphogranuloma venereum in the United Kingdom. *Clin Infect Dis* 2007;**44**:26–32.
10. **Herida M**, de Barbeyrac B, Sednaoui P, *et al*. Rectal lymphogranuloma venereum surveillance in France 2004–2005. *Euro Surveill* 2006;**11**:155–6.