

LETTERS

Are serological chlamydia-specific markers useful to detect asymptomatic cases of lymphogranuloma venereum proctitis?

Recent reports on lymphogranuloma venereum (LGV) proctitis in men who have sex with men (MSM) have highlighted the fact that affordable diagnostic procedures for both symptomatic as well as asymptomatic LGV infections are urgently needed.^{1,2} LGV responds well to extensive antibiotic treatment but when untreated, LGV can cause chronic or irreversible complications as a result of severe inflammation and invasive infection.³

In a recent interesting study, van der Snoek *et al*⁴ concluded that an elevated *Chlamydia trachomatis* IgA antibody response and the age of the infected individual are of possible diagnostic value for the early detection of LGV proctitis. Based on their study of 24 MSM with L2 proctitis and 15 MSM with rectal *C. trachomatis* (non-LGV) infection, the authors suggest that the association between LGV L2 and significantly higher titres of IgA and IgG are caused by more invasive and more chronic inflammation of the proctum caused by the LGV biovar.

As published previously, and also mentioned in the article by van der Snoek *et al*,⁴ a considerable number of the patients with LGV proctitis in the present epidemic are asymptomatic.^{2,5} In a retrospective case-control study² we found that only 47% of LGV cases had signs of proctitis (mucous membrane abnormalities) upon proctoscopic examination. Unfortunately, the paper by van der Snoek *et al*⁴ failed to inform its readers about the patient complaints and/or clinical symptoms found among the patients included. Their recommendation to test IgA levels in high-risk populations to exclude LGV might therefore possibly miss a considerable number of asymptomatic cases of LGV proctitis, with consequences for both the individual patient and the population at risk.

We previously studied MSM patients with any form of chlamydial proctitis and they were designated into two groups on the basis of mucous membrane abnormalities found during proctoscopic examination.⁵ In the group of 44 cases with mucous membrane abnormalities, 32 had LGV proctitis and 12 had non-LGV chlamydial proctitis. In the group of 30 men without mucous membrane abnormalities, 13 had LGV proctitis and 17 had non-LGV proctitis. In the group with mucous membrane abnormalities IgG serology (*C. trachomatis*-IgG pELISA; Medac Diagnostika GmbH, Hamburg, Germany) had a high positive

predictive value for LGV proctitis (0.94) when a cut-off value of less than 1 : 200 was used. In the group without mucous membrane abnormalities, however, both the positive and negative predictive value were low (0.57 and 0.65, respectively). We concluded that IgG species-specific serology could help support the LGV diagnosis when clinical symptoms are present but cannot be used for screening purposes to detect LGV-infected individuals without clinical symptoms.

In a second retrospective case-control study performed by our group in Amsterdam,² proctoscopic examination and anal mucosal smears in MSM with receptive anal sex in the previous six months were found to be helpful to detect LGV proctitis. In that study, 87 men with proctitis based on *C. trachomatis* serovar L2b men were compared with two separate control groups: MSM who had non-LGV chlamydia proctitis (n = 377) and MSM who reported having receptive anorectal intercourse but who did not have anorectal chlamydia (n = 2677). Apart from HIV seropositivity, either proctitis detected by proctoscopic examination or elevated more than 10 white blood cells per high-power field detected on an anorectal smear specimen were found to be the only clinically relevant predictors of LGV proctitis in MSM.

In the recently published IUSTI/WHO guideline on sexually transmitted proctitis, it is recommended to perform proctoscopy and anal mucosal smears in all MSM with receptive anal sex in the previous six months and to screen for anal chlamydia and gonorrhoea.⁶ In case inflammatory signs and/or more than 10 leukocytes per high-power field upon microscopic examination of anal mucosal smears are detected, presumptive treatment with doxycycline is advised until the definite diagnosis becomes available. In case anal chlamydia is found, biovar determination of the chlamydia strain is indicated to confirm potential LGV proctitis.

In the ongoing LGV proctitis epidemic there is a great need for simple and affordable diagnostic procedures to screen the (asymptomatic) population at risk. Additional serological markers are required to evaluate as diagnostic tools for LGV proctitis in larger, well-defined and described cohorts. Until those studies are performed, the gold standard for LGV diagnostics (both in symptomatic as well as in asymptomatic patients) remains the molecular determination of chlamydia biovars.

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Authors' reply

In a recent paper we concluded that an elevated IgA antibody response and the age of the infected individual (a total sum score of 7 times IgA titre plus individual's age ≥ 50.0 years) appeared to be of diagnostic value for (early) detection of lymphogranuloma venereum (LGV) proctitis (*Sex Transm Infect* 2007;**83**:330–4). Statistical analyses showed that the use of this total sum score had high diagnostic accuracy. As published previously, over 85% of the Rotterdam population of patients with L2 proctitis reported symptoms (rectal discharge and bleeding) and more than 70% had clinical manifestations (discharge and perianal erythema).¹

We agree with de Vries *et al* and acknowledge the need for “simple and affordable diagnostic procedures to screen the (asymptomatic) population at risk”. Our data show that Chlamydia-specific IgA antibody titres can be adequately used for the early discrimination between LGV and non-LGV proctitis—a clear reflection of the more invasive character of the LGV serovars. Therefore, one might postulate that our sum score cannot serologically discriminate between LGV and non-LGV serovars in persons without mucosal abnormalities. After all, there must be at least some degree of tissue invasion (together with visible