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Lymphogranuloma venereum in The Czech Republic

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Introduction:
Lymphogranuloma venereum (LGV) is caused by *Chlamydia trachomatis* serovars L1 – L3. LGV was considered as tropical disease with typical inguinal syndrome and it wasn't usual in Europe until 2003, when an outbreak was observed in the Netherlands. This was followed by series of outbreaks emerging in different European countries and North America. A common feature for this epidemic is men who have sex with men (MSM) with signs of severe proctocolitis. Most of the patients are co-infected with HIV and/or other sexually transmitted infections (STI).

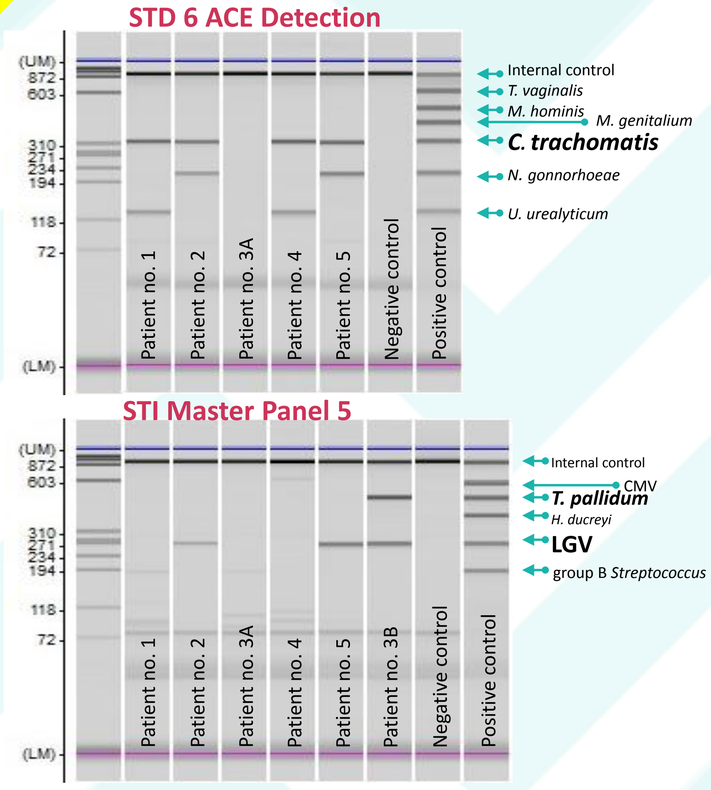

Fig 1: PCR results using Seeplex ® STI Master panel 5 and STD6 ACE Detection on MultiNA System. Chlamydia trachomatis DNA was succesfully detected in 4 clinical samples collected from 5 patients using Seeplex ® STD 6 ACE Detection. 3 cases of LGV was detected in 6 clinical samples collected from 5 patients using Seeplex ® STI Master Panel 5.
Clinical samples: patient 1, 2, 3A, 4, 5 – anal swab, patient 3B – specimen from ulcer

Methods:
The National Reference Laboratory for Chlamydia Infections offers a diagnostic service to clinicians. The disease is confirmed by the presence of *Chlamydia trachomatis* and L1 – L3 serovars using multiplex PCR (Seegene). Multiplex PCR is very useful, because multiple infections are observed in many cases (see figure 1).

First case of LGV was diagnosed from a lymph node puncture in 2010. Then the number of patients was slowly increasing (5 - 10 patients per year) and the most cases were diagnosed in 2014 (23 patients). Until August 2015, **a total of 70 patients with LGV were confirmed** (figure 2).
Characteristics of these cases were similar to those in other European countries. LGV infection is most common in MSM, age group 35 to 39 years (figure 3).
We confirmed **7 LGV re-infections**.

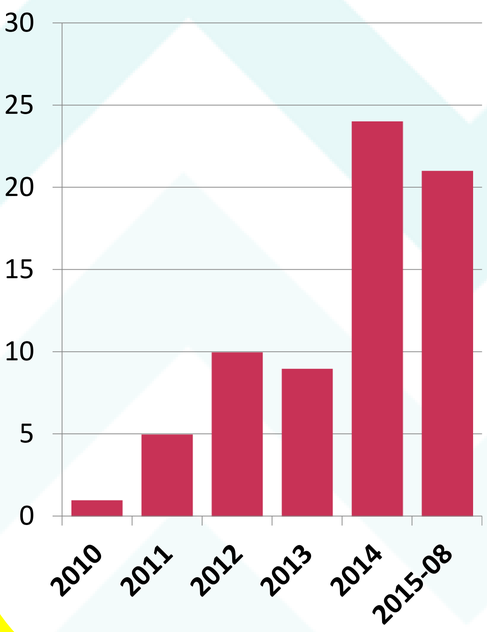

Fig 2: Number of cases per year

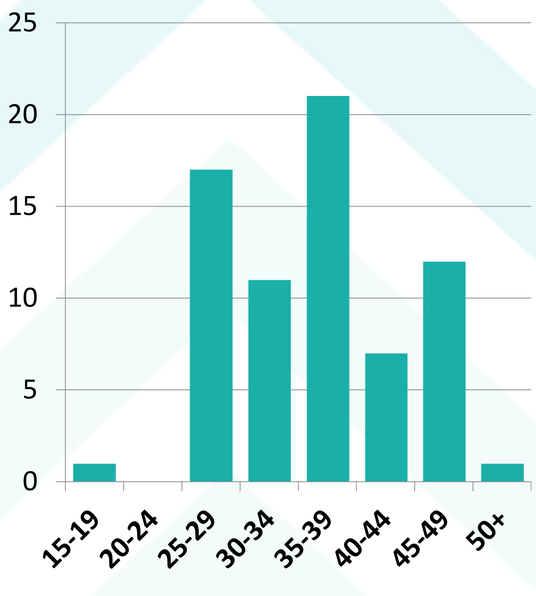

Fig 3: Number of cases by age

LGV was confirmed among MSM with high prevalence of other STI. Sixty-three patients (90 %) were co-infected with HIV (figure 4). In some cases, HIV and LGV were diagnosed at approximately the same time. Fifty-four patients (73 %) were co-infected with syphilis (figure 5). The data on other STI are not completed. Because the overwhelming majority of our patients comes from clinics specialised on HIV positive patients (most frequenly from AIDS centre, University Hospital Bulovka), we confirmed so many cases LGV with HIV co-infection.

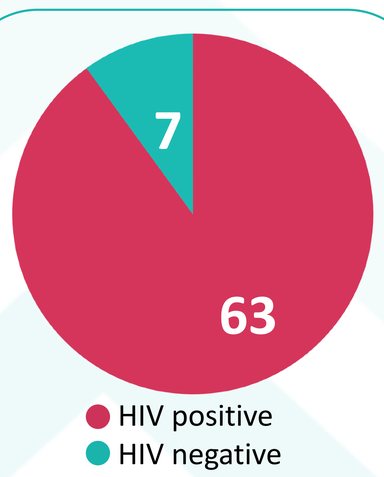

Fig. 4: HIV co-infection

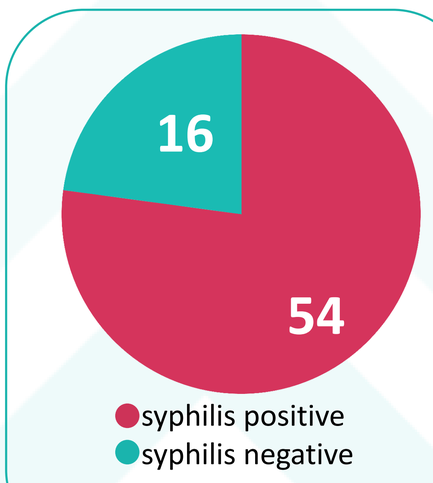

Fig. 5: HIV co-infection

The vast majority of patients manifested **proctocolitis**. Only in few cases the inguinal syndrome was observed.
In total, 185 clinical specimens were tested in NRL for Chlamydia. 162 samples were positive for C. trachomatis DNA. 75 samples (46 %) were positive for L1 – L3 serovars. Most of the positive samples were anal swabs (figure 6) .

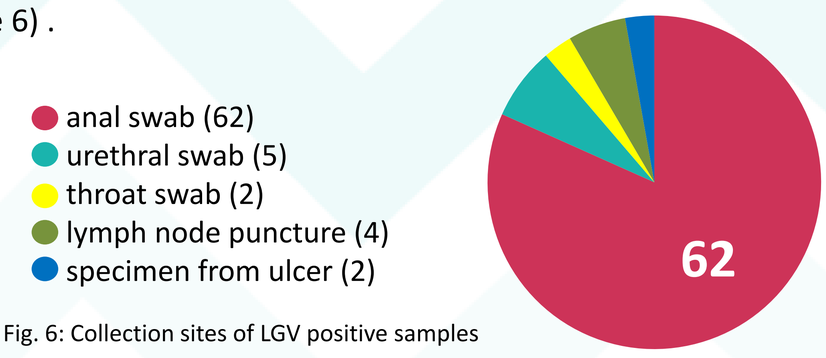

Fig. 6: Collection sites of LGV positive samples

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