

# High prevalence of HIV infection in homo/bisexual men with other sexually transmitted diseases

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## Introduction and Purpose

In Spain, current data shown that homo/bisexual men are more severely affected by sexually transmitted diseases (STDs) than other populations groups. Taking into account that the presence of STDs increases the risk of human immunodeficiency virus (HIV) transmission, we have analysed the prevalence of HIV in homo/bisexual men diagnosed of *Neisseria gonorrhoeae*, *Chlamydia trachomatis* or syphilis, between 2009 and 2012 in a STD clinic in Madrid.

## Methods

We analysed 21,297 samples of urethral, pharyngeal and rectal exudates by molecular methods (*Chlamydia trachomatis*), Gram staining and culture in Thayer Martin agar medium at 37°C in a CO<sub>2</sub> atmosphere (*Neisseria gonorrhoeae*) and serological methods (syphilis). Providing that any STD was detected, a HIV serological test was also performed.

### STD examined

- Gonococcal infection
- Chlamydia trachomatis (CT) infection
- Syphilis
- HIV

### Methods used

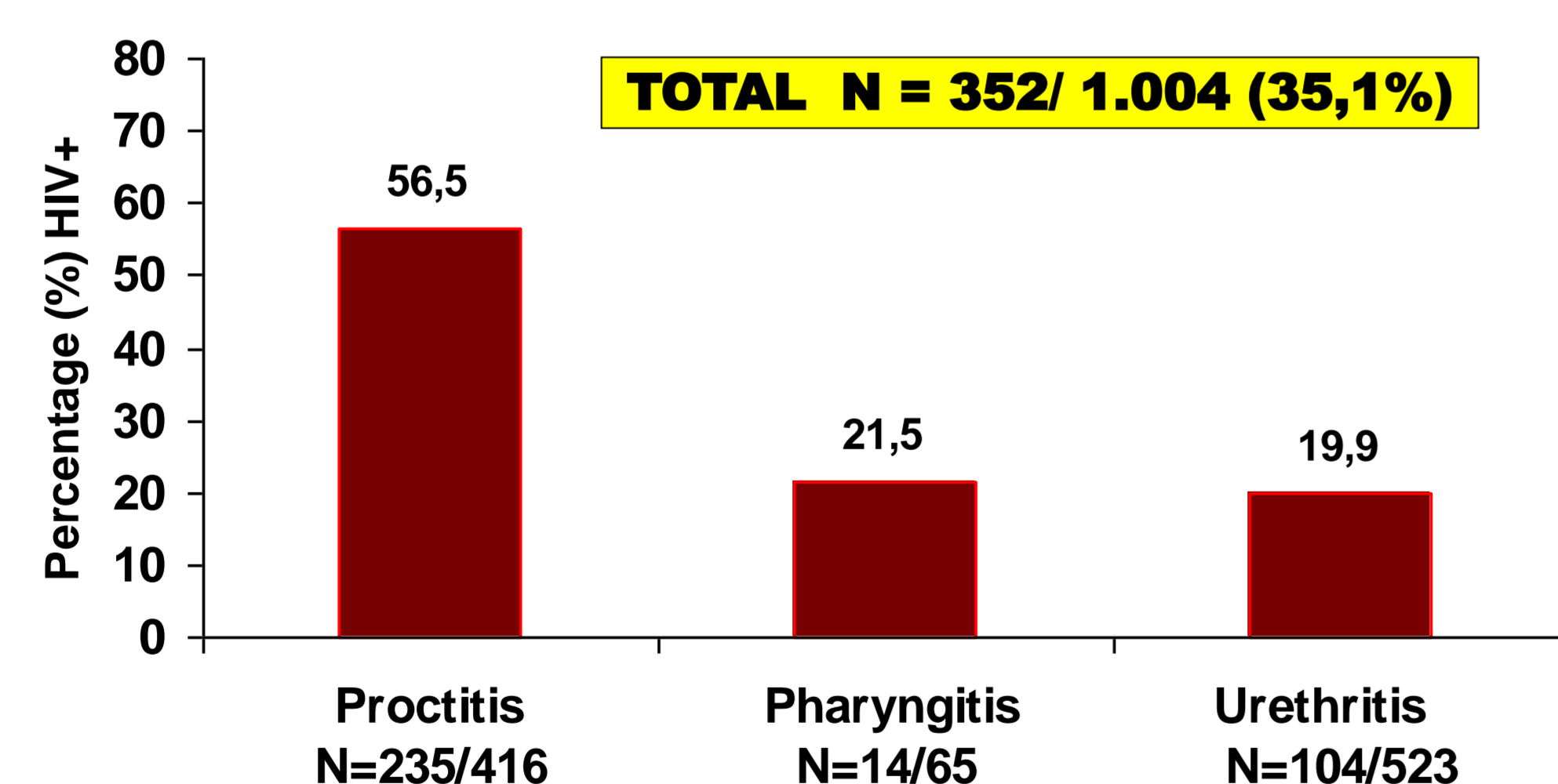
- Gram staining and culture in Thayer Martin agar medium at 37°C in a CO<sub>2</sub> atmosphere
- Real time PCR (Abbott Molecular)
- Dark-field microscopy (DFM) and serological tests: RPR, ELISA, TPPA
- ARCHITECT Ag/ Ab HIV-1/2 Combo test (ABBOTT) Confirmation by immunoblotting NEW LAV BLOT (BIO-RAD)

## Results

### Neisseria gonorrhoeae

It was detected in 1,004 cases. Prevalence of HIV coinfection was 35.1%. By localisation of gonococci, HIV infection was identified in 56.5% of proctitis cases versus 21.5 and 19.9%, pharyngitis and urethritis cases, respectively (p<0.001).

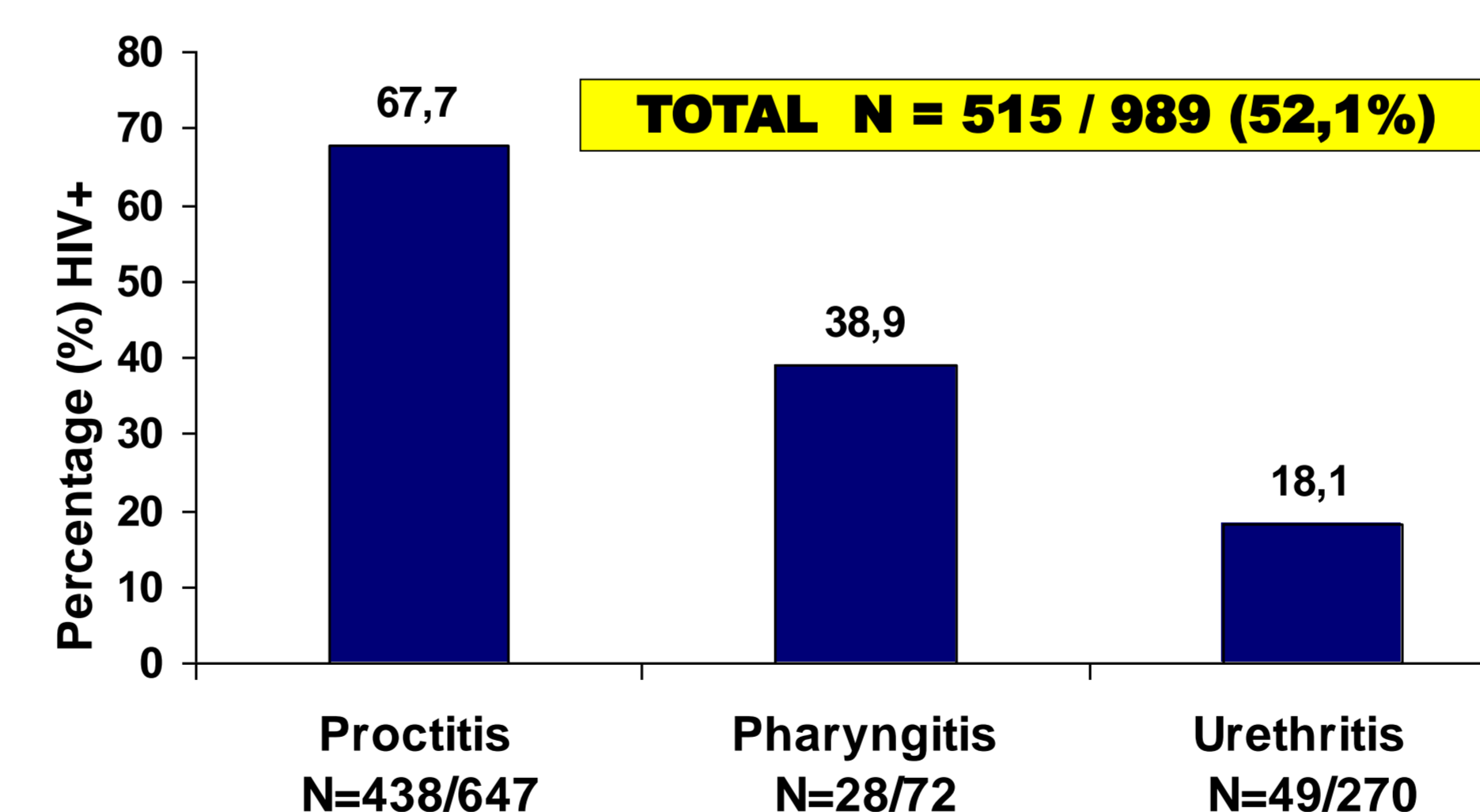
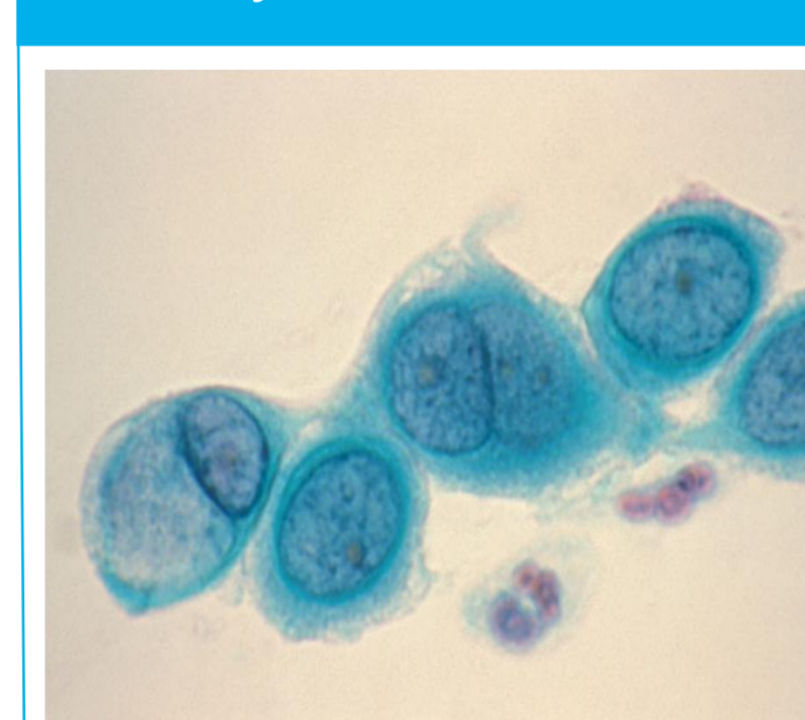
Neisseria gonorrhoeae



### Chlamydia trachomatis

It was detected in 989 cases. Prevalence of HIV coinfection was 52.1%. There is a statistically significant difference in the HIV prevalence by localization of C.T., being 67.7, 38.9 and 18.1% for proctitis, pharyngitis and urethritis, respectively (p<0.001).

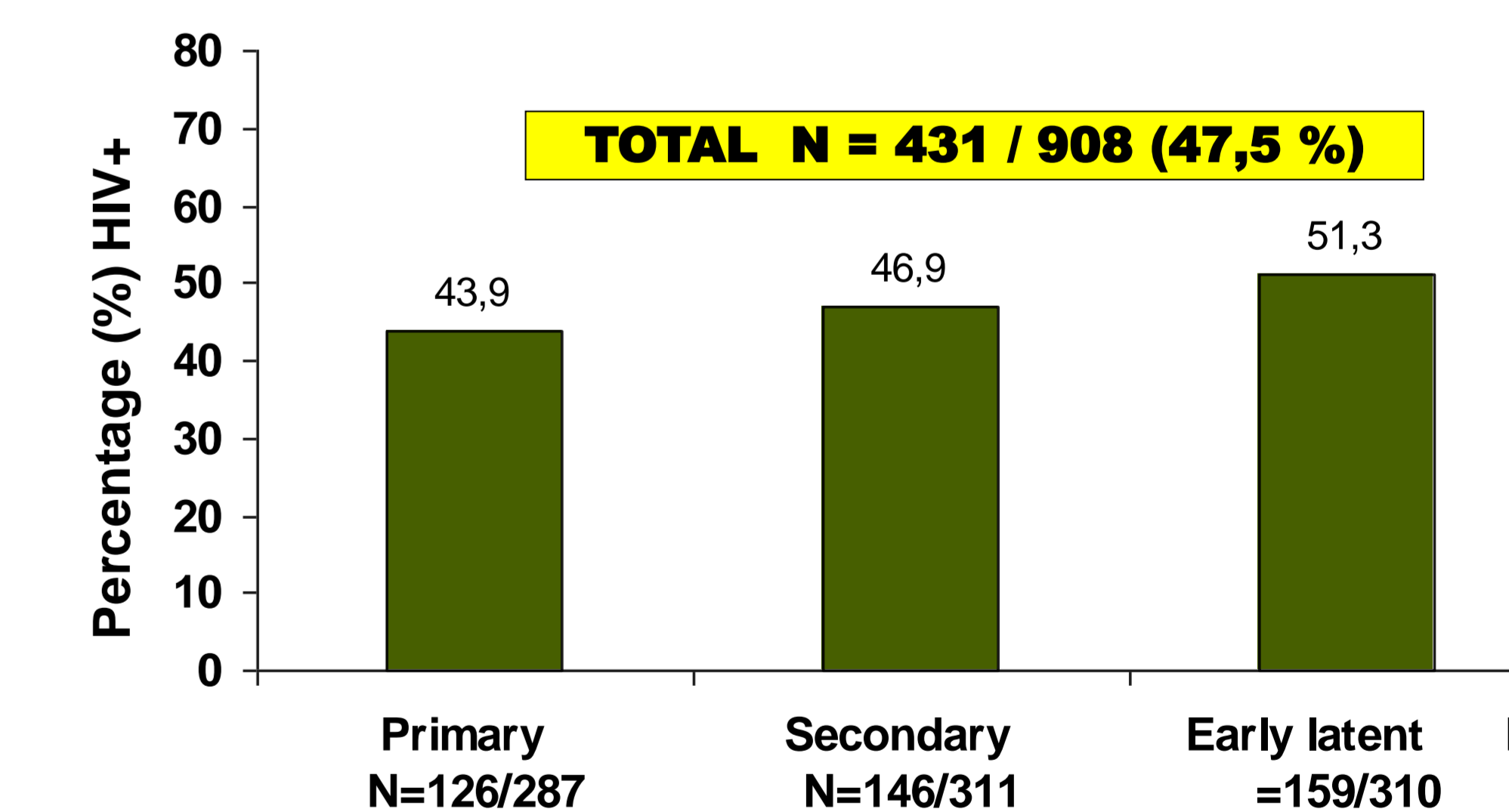
Chlamydia trachomatis



### Early syphilis

It was diagnosed in 908 cases (287 primary, 311 secondary and 310 early latent), 47.5% of them coinfecting with HIV. They represented 43.9, 46.9 and 51.3% of the primary, secondary and early latent syphilis cases, respectively.

Treponema pallidum



## Conclusions

- ❖ A very high HIV prevalence was found in homo/bisexual men with *C. trachomatis* or early syphilis than in those infected by *N. gonorrhoeae*.
- ❖ According to localisation, patients with proctitis showed a higher prevalence of HIV coinfection than those with pharyngitis or urethritis, being proctitis by *C. trachomatis* the highest association.
- ❖ Early diagnosis and prompt treatment of STDs can reduce the risk of HIV transmission.
- ❖ It is highly recommended to carry out always a HIV serology in homo/bisexual men with other STDs and also a screening for other STDs in HIV-positive patients according to their risk practices, including genital and extragenital exudates.