

00024 Pharyngeal chlamydia and gonorrhoea: a hidden problem

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Background: *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) represent the most common agents of sexually transmitted pharyngeal infections. These conditions are frequently asymptomatic, acting as important reservoir for further transmission.

The aim of this study was to assess the prevalence and predictors of pharyngeal infections due to CT and NG in a cohort of patients attending a STI Clinic in the North of Italy.

Materials/methods: From January 2016 to September 2018, all the consecutive patients attending the STI Outpatients Clinic of St. Orsola-Malpighi Hospital (Bologna) and reporting unsafe oral intercourses were considered eligible for the study. After a clinical examination, a pharyngeal swab for the molecular detection of CT and NG (Versant CT/GC DNA 1.0 Assay; Siemens) was collected from each patient. Moreover, on the basis of patients' sexual behavior and symptoms, urine samples and/or ano-rectal swabs for CT/NG detection were collected. In case of a CT positivity, a molecular genotyping based on *omp1* gene PCR, was performed.

Results: During the study period, 893 patients (119 females and 774 MSM) were enrolled. Globally, a total of 134 cases of gonorrhoea (15%) and 34 chlamydial infections (3.8%) were detected in the pharyngeal site, with no significant differences between males and females.

More than 90% of the pharyngeal infections were completely asymptomatic and the presence of symptoms was not a predictor of a pharyngeal infection ($P=0.7$).

On the contrary, a history of sexual contacts with a partner positive for CT and/or NG ($P<0.0001$), the HIV-positivity ($P=0.01$), as well as the detection of a genital or rectal chlamydia or gonorrhoea ($P<0.0001$) were significantly associated with the presence of a pharyngeal infection.

For patients providing urines in addition to pharyngeal swabs, a total of 79.2% of CT and/or NG infections would have been missed if the pharyngeal site had not been tested.

Pharyngeal LGV was quite rare, with an overall prevalence of 0.4%. All LGV pharyngeal cases were found in asymptomatic MSM.

Conclusions: A deep knowledge about the prevalence and characteristics of pharyngeal CT/NG infections could help to set up effective strategies for the prevention of STI acquisition and spread.

