

*Clinical study*

# AZITHROMYCIN IN THE TREATMENT OF CHLAMYDIAL CERVICITIS AND URETHRITIS

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## ABSTRACT

In a first step, the efficacy and safety of azithromycin as compared to doxycycline in the treatment of uncomplicated chlamydial cervicitis were assessed in a randomized, open clinical study. 32 female patients were enrolled in the study and treated either with a single oral dose of 1 g azithromycin or with a conventional course of doxycycline 100 mg b.i.d. for 7 days. In a second step, an open prospective evaluation was carried out comprising another 37 patients (25 males, 12 females) with chlamydial urethritis and/or cervicitis. The infection was verified by a non-radioactive RNA:DNA hybridization test and - in case of the comparative study groups - confirmed by positive culture. In a first follow up control all patients - except one treated with azithromycin - turned out to be clinically and microbiologically cured. The exceptional case rather seemed to be due to reinfection than to therapeutic failure. Both antibiotics were tolerated well; mild gastrointestinal side effects were reported in rare cases only. Our study confirms that in the treatment of uncomplicated chlamydial cervicitis and/or urethritis a single dose of 1 g azithromycin is as effective as doxycycline 100 mg b.i.d. for 7 days.

## KEY WORDS

*azithromycin, doxycycline, Chlamydia trachomatis, cervicitis, urethritis*

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## INTRODUCTION

Conventional antibiotics used for treatment of infections with *Chlamydia trachomatis* (Ct) have to be administered in multiple doses for several days. Within such a course treatment failures due to minor compliance bear the risk of persisting infections. This could be avoided by use of a single-dose treatment.

Azithromycin is a new semi-synthetic azalide antibiotic with an antimicrobial spectrum similar to

that of erythromycin. Additionally azithromycin has enhanced potency against gram-negative organism (14). Its bactericidal effect is based on the inhibition of polypeptide synthesis by binding to the 50S ribosomal subunit. Cross-resistance of erythromycin-resistant gram-positive organisms is to be expected, for azithromycin appears to bind also to the erythromycin ribosomal binding site.

The activity of azithromycin against Ct is similar to that of erythromycin and doxycycline with regard to the values of minimal bactericidal concentration

