

APPROPRIATENESS OF EMPIRICAL ANTIBIOTIC THERAPY FOR CERVICITIS AND URETHRITIS PRESCRIBED AT THE EMERGENCY DEPARTMENT

Ana de Lorenzo-Pinto¹, Cristina Ortega-Navarro¹, Beatriz Torroba-Sanz¹, Cecilia M Fernández Llamazares¹, Irene Taladriz-Sender¹, Ana Castuera-Gil², Juan A Andueza-Lillo², Ana Herranz-Alonso¹, María Sanjurjo-Sáez¹

¹Servicio de Farmacia. Hospital General Universitario Gregorio Marañón.

²Servicio de Urgencias. Hospital General Universitario Gregorio Marañón.

OBJECTIVES

Background and importance: Sexually transmitted diseases are the most common cause of urethritis and cervicitis. *Neisseria gonorrhoeae* and *Chlamydia trachomatis* are frequently involved in the development of these infections. Guidelines have recently updated treatment recommendations due to the increasing prevalence of antimicrobial resistance.

Aim and objectives: To assess the appropriateness of empirical antibiotic therapy for cervicitis and urethritis prescribed at the Emergency Department (ED).

MATERIALS AND METHODS

We designed an observational, descriptive and retrospective study.



Inclusion criteria: adult patients with suspected cervicitis or urethritis who attended the ED of a tertiary hospital in 2020. Patients with suspected pelvic inflammatory disease, prostatitis and those who required hospital admission were excluded.

Recommendations for the empirical treatment

Ceftriaxone 500 mg IM QD + Azithromycin 1,000 mg oral QD	Ceftriaxone 500 mg IM QD + Doxycycline 100 mg oral BID for 7 days
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Appropriateness of empirical antibiotic therapy was evaluated taking into account **four aspects**:

- Indication
- Dosing
- Duration of therapy
- Route of administration

In this way, patients could be classified as **undertreated or overtreated**.

Data was obtained from the electronic medical record, the electronic prescription program and the discharge summary. Ethical approval was obtained from the institutional review board.

RESULTS

176 patients were included, mean age was 28.9 years (SD = 7.7) and 90.9% were men.

The most commonly prescribed treatment was the combination of ceftriaxone and azithromycin (83.0%).

The percentage of patients that received inadequate treatment was **72.7%**. The total number of drug errors was 148.

The most frequent cause was **undertreatment** (55.5%) related to underdosing (50.7%), particularly with regard to ceftriaxone.

The percentage of errors related to:

- Indication: 10.8%
- Dosing: 85.8%
- Duration: 3.4%
- Route of administration: 0%

33.3% of the patients treated with **doxycycline did not collect the medication** at the pharmacy to complete the course of the antibiotic.

CONCLUSION AND RELEVANCE

A high percentage of patients who attended the ED for cervicitis or urethritis received an inappropriate empirical antibiotic regimen. The main reason was undertreatment due to underdosing. The use of a standard order set could optimize antimicrobial therapy.

