

## *Legionella pneumophila*

(2006/6/26 , 2006/2/8 )

*Legionella pneumophila* 43  
150 (*L. pneumophila*)

Azithromycin

Erythromycin % 93

% 81.4

%14

Vancomycin

% 7

Cephalothin

### **The Sensitivity of *Legionella pneumophila* to Common Antibiotics**

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#### **ABSTRACT**

The study included sensitivity of 43 isolates of *Legionella pneumophila* (*L. pneumophila*) isolated from 150 samples of different water sources. The bacterium was identified depending on morphological, cultural and biochemical tests. The results showed that these isolates exhibit different sensitivity for antibiotics that used in this study. It showed high sensitivity to Azithromycin (93%)

which was higher than Erythromycin that used widely in treatment of the infections of this bacteria (81.4 %), while it showed sensitivity to Cephalothin and Vancomycin with respectively (7%, 14%). The isolates showed clear difference in the rate of their sensitivity and resistance to other antibiotics used in this study.

1976

(Englis, 2000)

McDade

1977

Atlanta

Centers for Disease Control (CDC)

*L. pneumophila*

Reingold et al., 1984 ;

% 80

Legionella

Sabria and Victor, 2002

Legionellosis

(1994)

Ford

Kramer

- :

**Legionnaires' Disease  
Pontiac Fever**

% 30

Legionella

*L. pneumophila*

Erythromycin

(1988)

Badenoch

(1988)

Winn

Pedro-Botet

21-14

(2002)

Rifampin

(1995)

Brown Barker

Erythromycin

Erythromycin

Doxycycline

Azithromycin

Pefloxacin

Ciprofloxacin

Fluoroquinolones

Clarithromycin

. (Koneman et al., 1997)

(1997) Yu Stout

.(1993) Edelstein

Azithromycin

Braude

Clindamycin Vancomycin Cephalosporins

(1988) Winn . (1981)

Cefamandole Cefazolin Cephalothin Carbenicillin Oxacillin Penicillin

Amikacin Tobramycin Gentamicin Cefoxitin

(2002) Forbes

.Aminoglycosides

(150)

2004 2004 -

L- Cysteine Hcl

*L. pneumophila* 43 Growth factors

Bauer-kirby

(Vandepitte et al., 1991) (Bauer et al., 1966)

Mueller Hinton agar

Oxoid

(5-3) . (Vandepitte et al., 1991)

Normal Saline

(Baron ( / 10 8) (1) MacFarland standard

. and Finegold, 1990)

Brooks et al., ) 37 72

(2001

*L. pneumophila* (1)

*L. pneumophila*

:1

				/		
%		%				
18.6	8	81.4	35	15	E	Erythromycin
41.9	18	58.1	25	20	CN	Gentamycin
11.6	5	88.4	38	5	RA	Rifampin
86	37	14	6	30	VA	Vancomycin
9.3	4	90.7	39	30	DO	Doxycycline
16.3	7	83.7	36	30	TE	Tetracycline
76.8	33	23.2	10	10	AM	Ampicillin
20.9	9	79.1	34	5	TMP	Trimethoprim
51.2	22	48.8	21	2	DA	Clindamycin
11.6	5	88.4	38	15	CLR	Clarithromycin
11.6	5	88.4	38	5	CIP	Ciprofloxacin
7	3	93	40	15	AZM	Azithromycin
93	40	7	3	30	KF	Cephalothin

% 93 Azithromycin

(2000) Bennett Goldman

*L. pneumophila*

Erythromycin

Clarithromycin Ciprofloxacin

(1993) Yu

Fluoroquinolones

Clarithromycin Azithromycin

Ciprofloxacin

Rifampin

(1995)

Winn

% 88.4

Erythromycin

% 81.6

(1993)

Edlestein

*L. pneumophila*

Tetracycline Doxycycline

Clarithromycin Ciprofloxacin

(2001)

Braunwald

Rifampin

Trimethoprim

(2003)

Tierney

86 % 93 Vancomycin Cephalothin

%

(Koneman et al., 1997)

Ampicillin

(1999)

Diago

$\beta$  - Lactamase

% 51.2

Gentamycin Clindamycin

(1981)

Braude

% 41.9

.(Brooks et al., (2001 MIC

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