

*Clostridium difficile*

(2004/ 10/ 23                      2004/ 7/ 7                      )

*Clostridium difficile*

12-5

% 17.3                      52

% 68    % 32

24-18

6 –

**Isolation and Identification of *Clostridium Difficile* from Patients with Colitis and Diarrhae in Ninevah Governorate**

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**ABSTRACT**

We report the isolation and identification of *Clostridium difficile* from infants having watery diarrhae at ages from after birth to 2 years old during the period from 5 to 12 days according to the clinical diagnosis and from colitis and diarrhoael cases caused

by using antibiotics. Morphological and biochemical tests were used for the identification of this bacterium .

The isolation percent from infantile watery diarrhea was 17.3 % while it form 32 % and 68 % from diarrhea and colitis cases in adult respectively. In studying the effect of age on its isolation percent from infantile diarrhea, it was found that this percent increased with age it formed higher isolation percentage in 18-24 month ages while it could not be isolated from after birth to 6 months infants.

1935 *Cl.difficile*

(AAD) Pseudomembranous colitis (PMC)  
 Associated Diarrhea- Antibiotic  
 . (Kelly et al., 1994 ; DeLalla et al.,1992 )

Brooks ) % 10-2 *Cl. difficile*  
 % 5-3 (et al.,1998

% 33 – 11 Colitis % 75-60  
 .(McFarland et al, 1989 ; Nolan et al., 1987) AAD  
 PMC  
 %10 PMC Lincomycin Clindamycin  
 .(Mangioni , et al., 1991)

(McFarland et al,1989 ;  
 (Ubiquitous) (Koneman et al.,1997) .Pothoulakis ,2002)

strictly *Cl. difficile*  
 anaerobic  
 48

Koneman et al.,1997 ; Fekety ) Cefoxitin Cycloserin  
 (and Shah, 1993  
 D1 A Enterotoxin

1981 Taylor  
 B (Rabbit ileal loop test)  
 Cytotoxin D<sub>2</sub>  
 (% 75) (Bartlett,1994)  
 .(Lyerly,1995 ; Bartlett,1990)  
 (Motility-  
 B A altering Factor)  
 . (Lyerly,1995)

52 •  
 Rectal swab 65 •  
 12-5 •

Oxoid (CCFA) Cycloserine-Cefaloxitine Fructose Agar .1  
 . % 5

5 Agar 40 Trypticase Soy Agar : .2  
<sup>3</sup> 1000 400 L-Cystein 5 Hemin 5  
 % 5 50

:

. (Koneman et al., 1997)

% 5

CCFA

37

48-24

. (Fedorko and Williams , 1997)

Alcohol-

<sup>3</sup>

1)

Spore-Selection

<sup>3</sup> 0.1

30 (

. (Koneman et al., 1997)

:

: .1

: (Koneman et al., 1997)

: .2

: \*

( 5) NaCl ( 10) Tryptose

: \*

( 1)

( 5) Agar ( 1)

\*

CCFA

Horse-stable

CCFA

(Non hemolytic)

. 2 1

(1)

(3)

. (4)

. (Koneman et al., 1997)

CCFA

*Clostridium difficile*

: 1

*Clostridium difficile* : 2

*Clostridium difficile* : 3

*Clostridium difficile* : 4

*.Cl. difficile* : 1

+	
+	
-	
+	
+	
-	
+	
+	
+	

% 17.3 (2)  
 ( 25) % 38.4 (52)  
 ( 17) % 68 ( 8) % 32

: 2

17.3	9		52
32	8		65
68	17		

10 -5%

*Cl. difficile*

B A

. (Knoop et al., 1993 ; Mulligan , 1984)

% 30-20 1996 Plum Benenett

6

*Cl. difficile*

2002 Pathoulakis

Ampicillin, Amoxicillin,

9-4

.Clindamycin Cephalosporins

(3 )

6 -

% 66.7

24-18

*Protective flora*

(Riley , 1984)

. (Bennett and Plum , 1996 ; deLalla et al., 1992)

: 3

-	0	6 -
11.1	1	12 - 6
22.2	2	18 - 12
66.7	6	24 - 18
100	9	

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