

Aeromonas caviae

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Aeromonas

A. caviae

Cytopathic effect (CPE)

Adhesion Ability of *Aeromonas caviae* to Vero Cells

Sahi J. Dhahi

*Department of Biology
College of Science
Mosul University*

Subhi H. Khalaf

*College of Nursing
Mosul University*

Thikra S. Ali

*Department of Microbiology
College of Veterinary Medicine
Mosul University*

ABSTRACT

To investigate factors contributing to pathogenicity of the *Aeromonas caviae* isolated from diarrhoeal children, the present work was hosted in Ibn-Al-Athir's Hospital and Al-Salam Hospital in Mosul city. The clinical isolates proved incapable of producing enterotoxin, but able to cause cytopathic effect (CPE) in cultured Vero cells. Furthermore, they were able to establish a diffusible adhesion to the host cells.

Fimbriae

Lectins Haemagglutinins
 .(Singh et al., 1993) *Aeromonas*

A. hydrophila

Glycoconjugates

Mucin

.(Ascencio et al., 1991; Sanderson et al., 1996)

.(Barnett et al., 1997)

A. hydrophila

HEp-2

(2.0-0.6)

Straight

(18) (17)

(4000)

Curvilinear and Flexible

Aeromonas caviae

A. veronii biotype *sobria*

A. hydrophila

(/ 20)

.(Kirov and Sanderson, 1995)

Bartkova and Ciznar (1994)

.Chinese Hamster Ovary cell (CHO cell) Vero cell HEp-2 cell Hela cell

Localized

Diffused

Aeromonas

.Aggregative

.Vero HEp-2

Aeromonas caviae

(850)

: *Aeromonas caviae*

(Koneman et al., 1997) 3 / 10

(Shotts and Rimler, 1973) -

(Rogol et al., 1979)

:(**Macfaddin, 1985**)

IMViC

(Baron and Finegold, 1990)

(Namdari and Cabelli, 1989)

Vero cells

(71)

) Tissue culture flask

°(-196)

(10) (1973) (Rovozzo and Burke)
 (%0.025) Trypsin-Versine Solution³
 (250X) Inverted microscope³ (50)

(4-3) ° (37)

Complete monolayer

Maintenance medium

Sigma Medium (199) (%10)
 Phenol red Lactalbumin hydrolysate (Na, Ca, Mg, Cl)
 (%10) New born calf serum (%10)
 .(7.2) Tryptose phosphate broth

: *Aeromonas caviae*

Aeromonas caviae

(24) ° (37)

³ /CFU ($10^6 \times 2$) (7.2)

.(Cruickshank et al., 1975)

*Aeromonas caviae*³ (1)

.(Kokka et al., 1992) (4) (90) ° (37)

Methanol-acetic

-

(10) (3:1) acid

(30) Giemsa stain

Namdari and Bottone, 1991; Bartkova and)

.(Ciznar, 1994

: *A. caviae*

Vero cell (1)

(2)

A. caviae

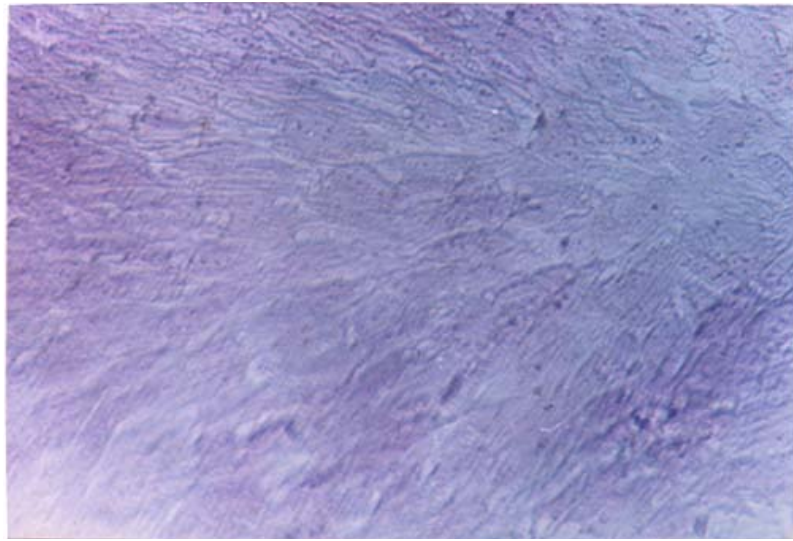
Cytopathic

effects (CPE)

(3)

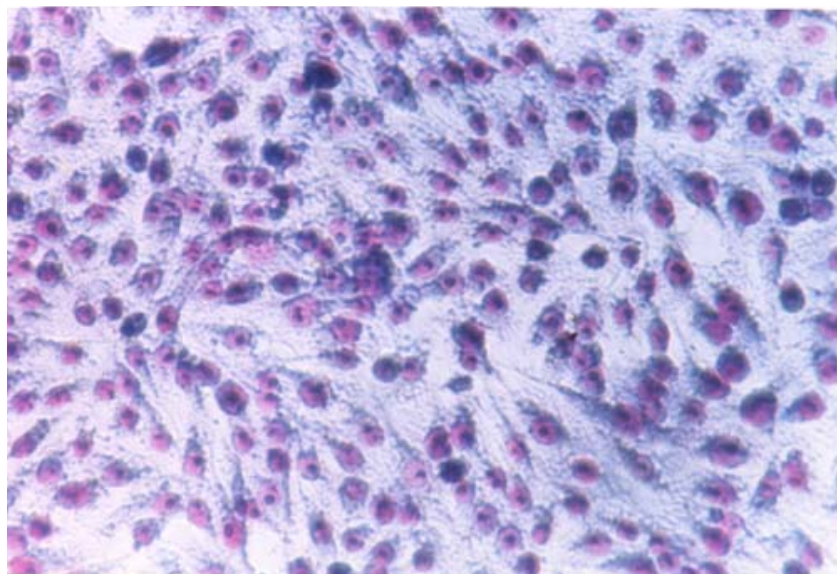
(125)

.(250)



:1

.(250X)



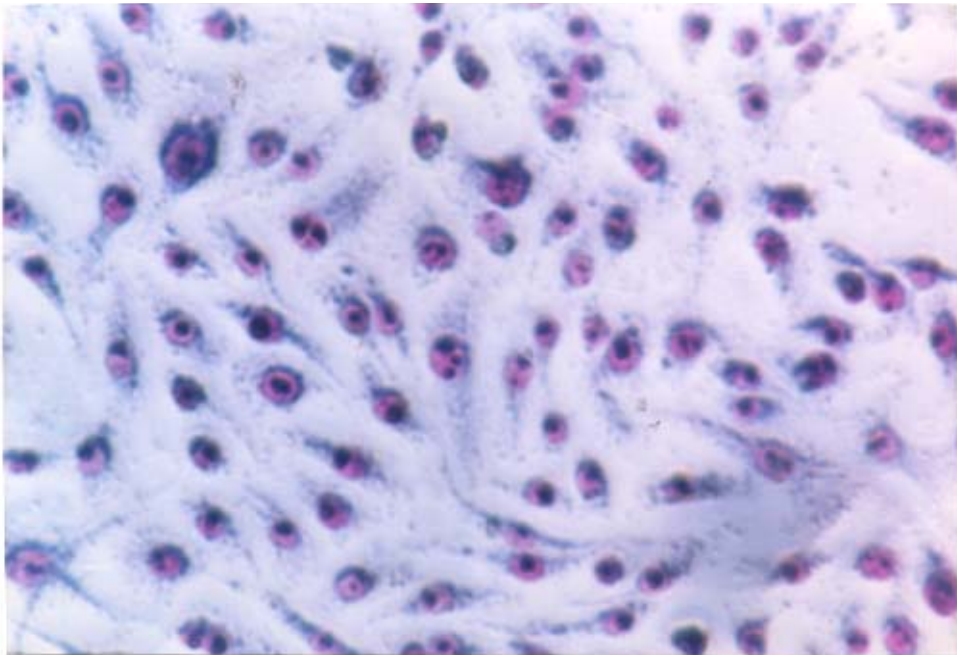
Aeromonas

Cytopathic effects

:2

.(125X)

A. caviae



Aeromonas

Cytopathic effects

:3

(250X)

A. caviae

A. caviae

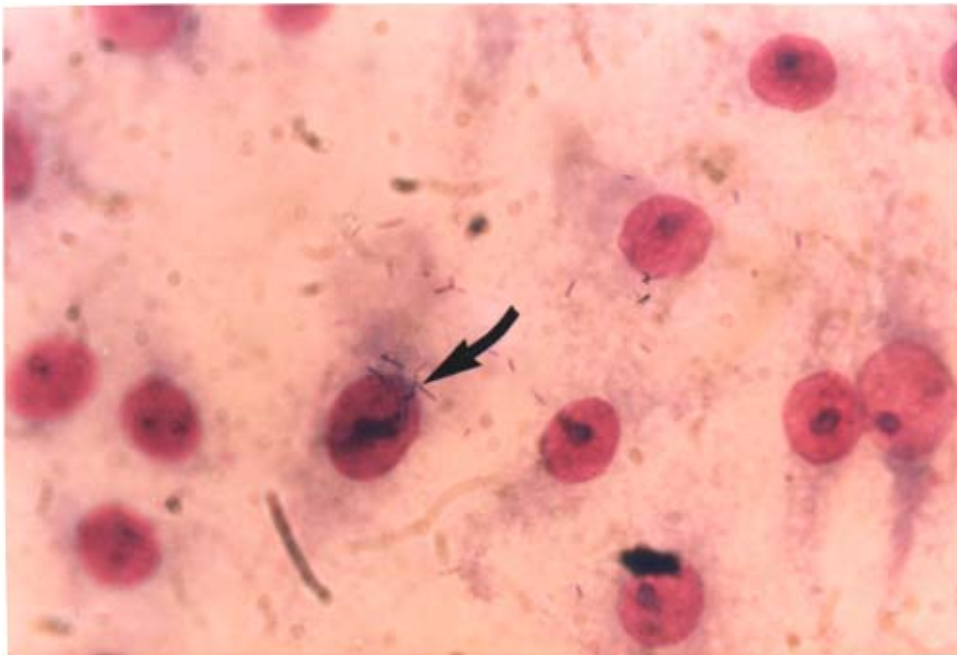
(1250)

(4)

(4)

(5)

(90)

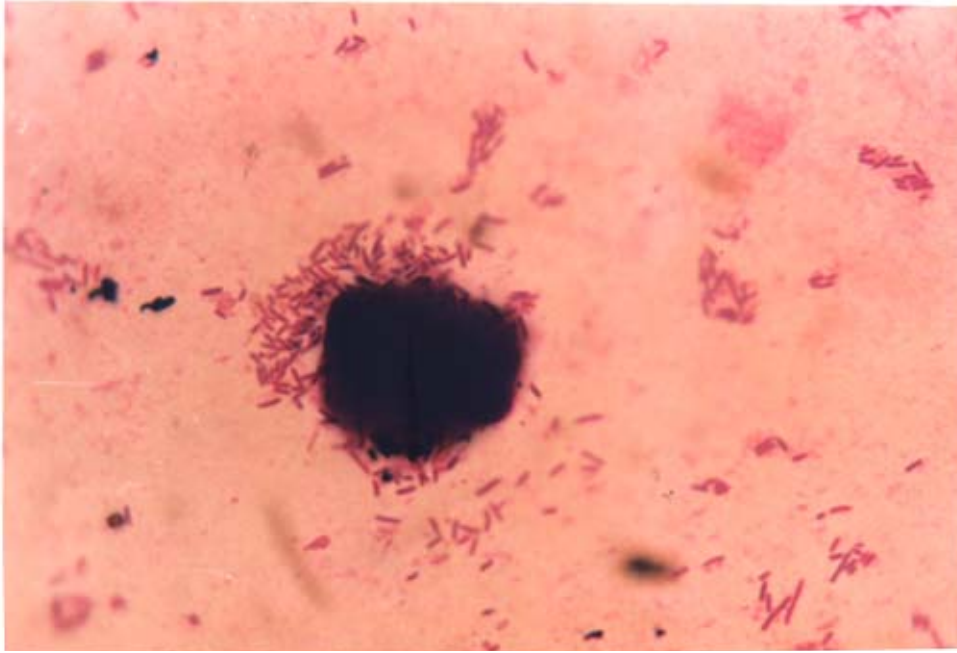


(90)

A. caviae

:4

(1250X)



(4) *A. caviae* :5
(1250X)

A. *A. caviae* (1)
3 /CFU ($10^6 \times 2$) *caviae*

3 /CFU ($10^6 \times 1$) (4)

Aeromonas :1

<i>Aeromonas caviae</i>						
t	SE ±		3	2	1	
**10	5.8 ± 200	* $10^6 \times 2$	200	210	190	
	5.8 ± 100	$10^6 \times 1$	110	90	100	

($10^6 \times 2$)

(2-1)

•

(10^4)

3 /FCU

(p=0.01)

**

A. caviae *Aeromonas*

(Burke *et al.*, 1981)

(0.083)

(Gut/Remaining body weight ratio ≤ 0.083)

A. caviae

(Mehdi *et al.*, 2000)

A. caviae

(Namdari and Bottone, 1990) Adherence

A. caviae

(3) (2)

(1)

(Wong *et al.*, 1996)

A. caviae

(Schiavano *et al.*, 1998)

-

A. caviae

(4)

(1)

A. caviae

Grey and Kirov (1993)

Pili

(Kirov *et al.*, 1998)

A. caviae

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