

Providencia alcalifaciens

(2008/10/13 ; 2008/9/8)

Providencia alcalifaciens

351

.%3.13

Isolation and Identification of *Providencia alcalifaciens* from Infantile Diarrhea and Study of the Histological Changes that it Cause

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ABSTRACT

Providencia alcalifaciens had been isolated and diagnosed 351 infantile diarrheal cases, from both sexes at the age of 2 years or less depending on screening tests that included microscopic examination and biochemical tests which formed 3.13%. Also the study detected the ability of *Providencia alcalifaciens* for the production of melanine like pigment upon it's growth on the special medium was distinguished by the appearance of brownish colour.

In order to study the invasion of enterocytes the mice infants were orally injected with the suspension of the bacterium. Then histological sections performed to study the mode of the entry of this bacterium the enterocytes. The microscopic findings showed pathogenic lesions in the intestinal tissue with hyperplasia in Payer's patches and infiltration of neutrophils and lymphocytes .

3.3

(Victoria *et al.*, 1990; Black, 1993; Zanbransky, 1997)

. (Mata *et al.*, 1984)

Providencia alcalifaciens

Enterobacteriales

.(Koneman *et al.*, 1997; Janda *et al.*, 1998;Senior,1998; Ohara *et al.*, 2000)

(1992)

Albert

Actin

HeLa

HEp-2

condensation

(Mathan *et al.*, 1993; Albert *et al.*, 1998)

(Guth and Perrella, 1996)

rectal swab 351

Sterile Nutrient Broth

24 MacConkey Agar

. ° 37

Catalase test

Glucose fermentaiton test

Oxidase test

Phenylalanine deaminase test

Hydrogen sulfide Indole Production and Motility test

Citrate

Voges-proskaure test

Methyl red test

Urease test

utilization test

Decarboxylation of Ariginine, Lysine and

Gelatin Liqification test

Ornithine test

Cruickshank *et al.*, 1975 ;) Carbohydrate fermentation tests

.(Macfaddin, 1985 ; Koneman *et al.*, 1997

. (Müller, 1985)

(6-4) Swiss mice

1

/ °10×2

3

6 ° 27

0.1

.(Adlard *et al.*, 1998)

351 %3.13

Providencia alcalifaciens

Prov. alcalifaciens

155

(1971)

Bhat

Providencia

165

%2.1

Prov. alcalifaciens

(1998)

Albert

Prov. alcalifaciens

(1996) Perella

Guth

HeLa

(1995)

Albert

14

Prov. alcalifaciens

Murata

(1998)

Janda

(2001)

7

Prov. alcalifaciens

.(1)

.Prov. alcalifaciens

:1

Prov.alcalifacie	Proteaceae			Tests
	ns.	<i>Providencia</i>	<i>Morganella</i>	
+	+	+	+	Catalase test
-	-	-	-	Oxidase test
+	+	+	+	Glucose fermentation test
+	+	+	V	Indole production
+	+	+	+	Methyl red test
-	-	-	V	Voges proskaure test
+	V	-	V	Citrate utilization
-	-	-	+	H ₂ S production (SIM) H ₂ S
-	V	+	+	Urease production
+	+	+	+	Phenylalanine deaminase test
-	-	+	V	Ornithine decarboxylase test
-	-	-	+	Gelatin hydrolysis
-	V	-	-	Acid production from insitol
+	+	+	-	Acid production from Mannose
-	-	-	+	Swarming

: +
:
: V

Dihydroxy

quinones

.(1)

(1985) Müller

Prov. alcalifaciens

24 6

Iliocecal junction

6

desquamation

necrosis

acute necrotic eneteritis

severe mucinous degeneration

infiltration

atrophy

edema

hyperplasia

hyperemia

hemorrhage

. (4) (3) (2)

24

6

payer's patches

pinocytic vesicles

Crypt

hypertrophy

(6) (5)

flattened

(7)

Prov. alcalifaciens

Prov. alcalifaciens

endocytosis
tight junction

(1993) Mathan

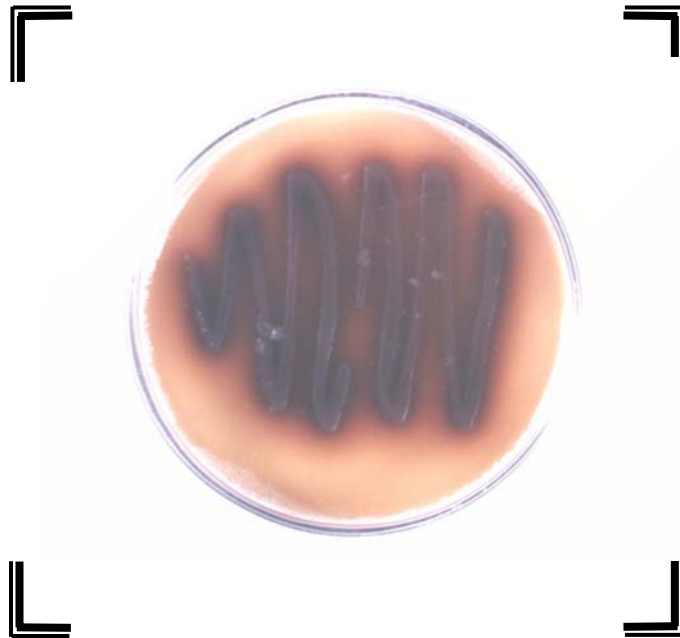
(2001) Murata . *Shigella flexneri*

.(1992) Albert

acute

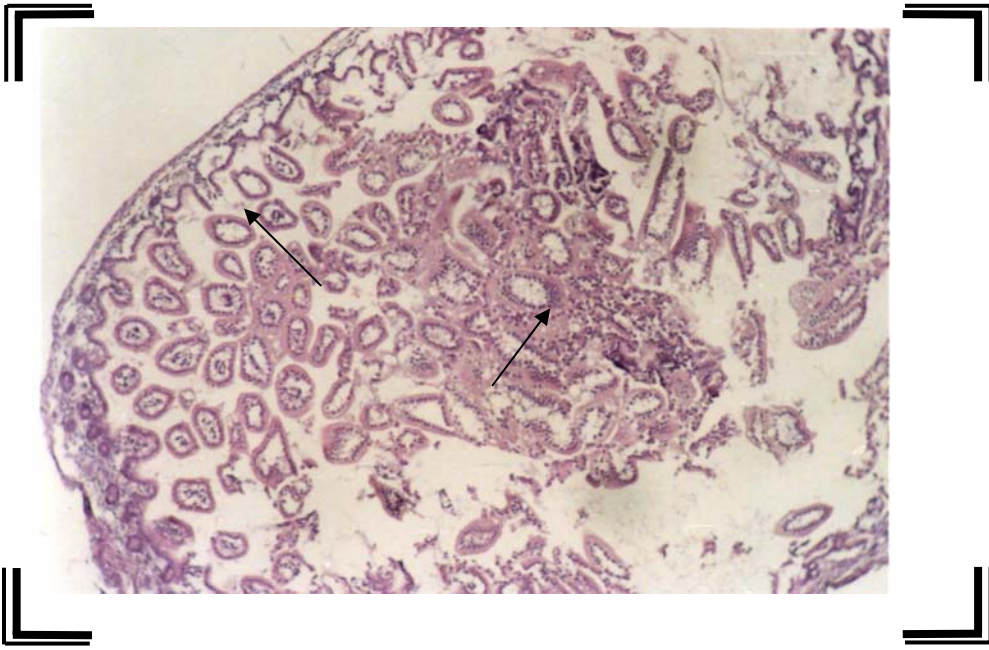
Chronic enteritis

enteritis



Prov. alcalifaciens

:1

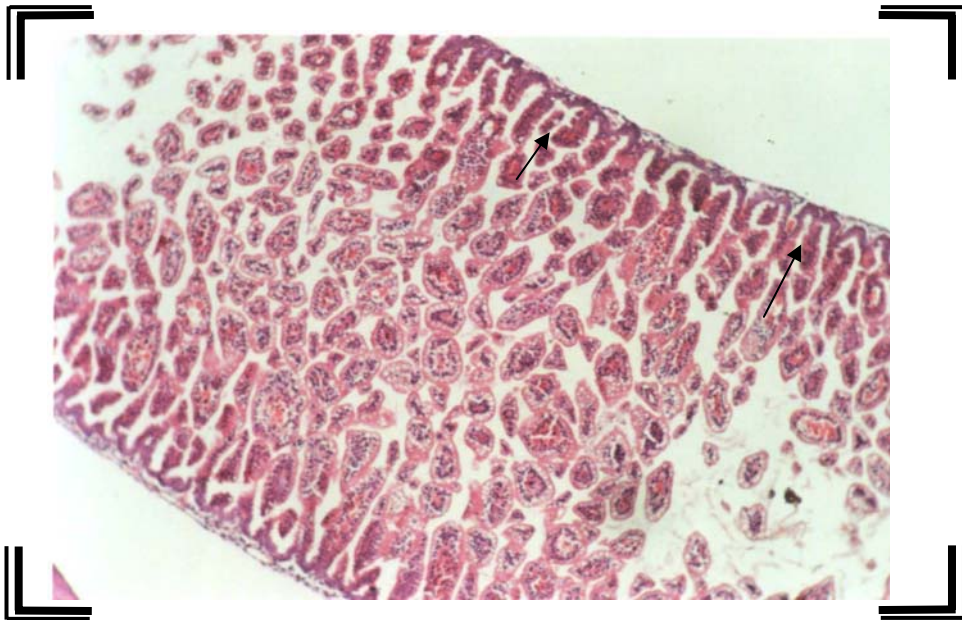


Prov. alcalifaciens

:2

6

. (10X)

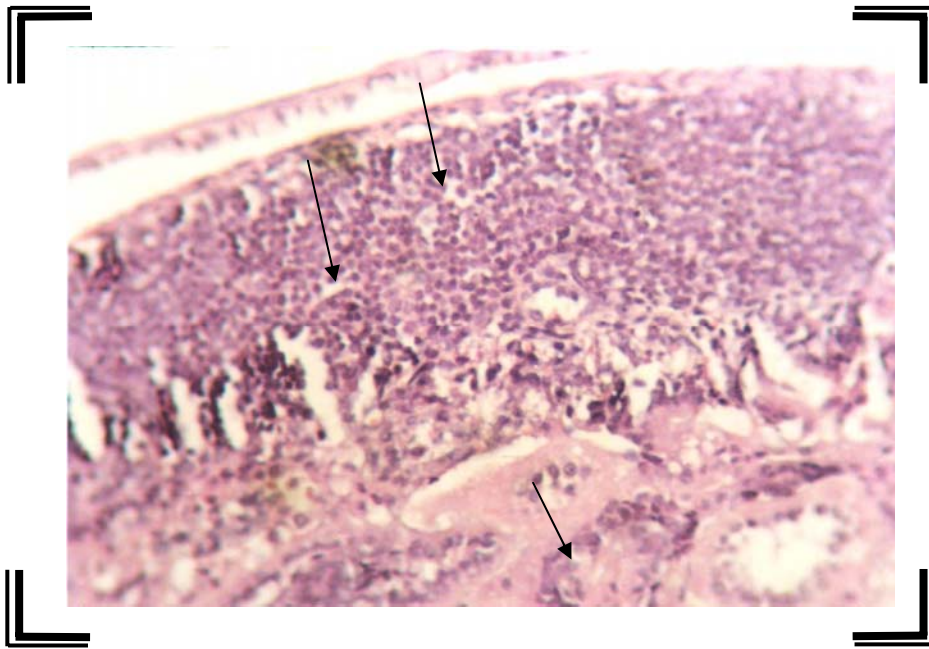


Prov. alcalifaciens

:3

6

.(10X)



prov. alcalifaciens

:4

6

.(40X)

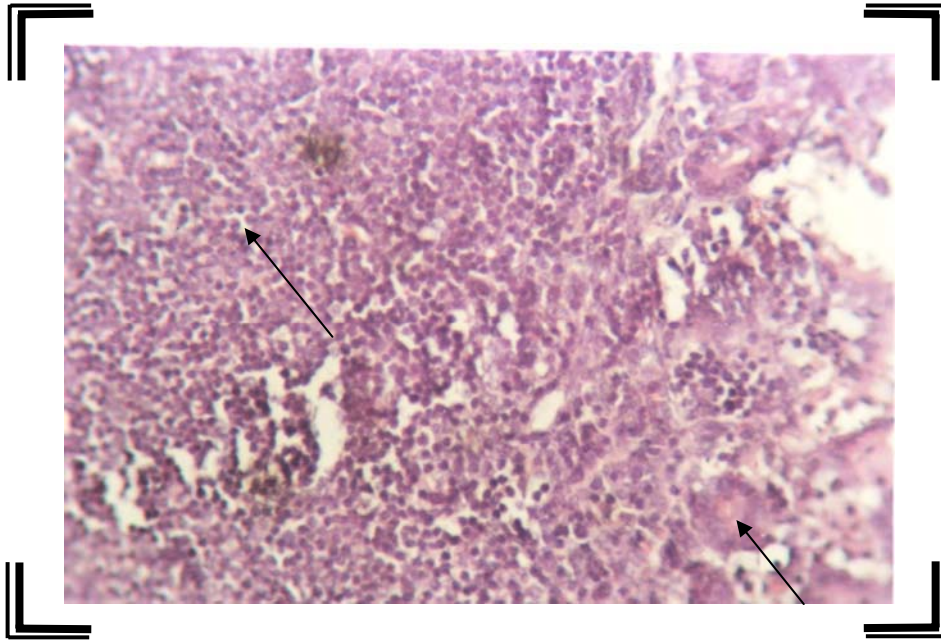


Prov. alcalifaciens

:5

24

.(10X)

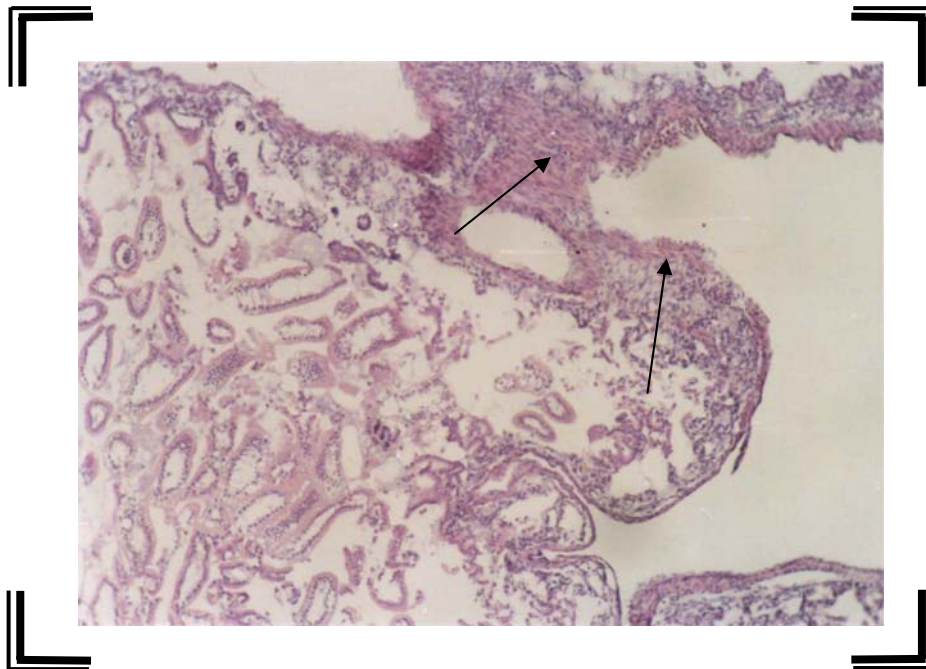


24

Prov. alcalifaciens

:6

-(40X)



Ileocecal junction :7

Prov. alcalifaciens

24

-(10X)

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