

2005 - - -

*

(HP)

2003 - 2002 - -

(%48.38)

HP

:

*

7

HP (%46.44) 15 HP

.(%87050) 16 HP 14

:

.HP %87.5 HP %93.33

%68.75 HP %80.00

(%100.00) .HP

HP

HP

:

The Role of Helicobacter Pylori in Gastritis and Gastroduodenitis in Children

Khaldoun Zaiyada *

Abstract

The aim of this study is to determine the incidence of helicobacter pylori (HP) in patients with chronic gastroduodenitis and to compare the clinical presentations between patients with positive HP chronic gastroduodenitis and those with negative HP. Also, To compare the endoscopic findings between patients with HP positive gastroduodenitis and HP negative children.

Gastroduodenoscopy was done for every child with abdominal pain admitted at the children hospital-Damascus University between 2002-2003. Mucosal biopsy was taken from every patient who had gastroduodenitis diagnosed by gastroduodenoscopy.

The percentage of patients with gastroduodenitis having HP positive erosions was 48.38 %.

Higher percentage of HP positive patient was more present in those with the erosion and sub-atrophy forms.

Sub-atrophy inflammatory was found in 7 out of 15 HP positive patients (46.66%) whereas superficial infection was found in 14 out of 16 HP negative patients (87.50 %).

* Instructor. Department of Pediatrics- faculty in medicine, Damascus University.

The study of the clinical presentation revealed : abdominal pain was found in 93.33% of HP positive patients and in 87.50 % of HP negative patients . Dyspepsia syndrome was noted in 80.00% of HP positive patients and in 68.74% of HP negative patients. Tenderness was found in all patients with or without HP.

This study emphasizes that there is no difference in the clinical presentations between HP positive or negative patients with gastroduodnitis. There was a significant difference in the endoscopic findings between patients with HP positive vs. HP negative gastroduodenitis.

These results may help the endoscopist to avoid unnecessary biopsies, decreasing the cost of the procedure.

Key words: Helicobacter Pylori, Gastritis, Duodenitis, Endoscopy, Abdominal pain, children .

(-HP)

:

-1

-

8 7 6 5 3 1)

24 21 20 19 18 14 13 12

-2

.(41 31 30 25

HP

HP

.HP

-3 34 32 29)

.(42 40 38

:

HP

.2003 - 2002

:()

.HP

:

.1

:(1)

)

:(

.HP

HP		
--	12	:
4	4	-
4	4	-
6	6	-
--	16	-
4	8	-
4	4	-
8	8	-
30	62	

HP

62

30

.(%48.38)

P- value	HP		HP		
					-1
P<0.01	%100	12	0	0	-
P<0.05	0	0	%100	4	-
P<0.05	0	0	%100	4	-
P<0.05	0	0	%100	6	-
					-2
P<0.01	%100	16	0	0	-
P<0.05	%50	4	%50	4	-
P<0.05	0	0	%100	4	-
P<0.05	0	0	%100	8	-

.2

: (2)

.HP

--	--	-
26.66	8	-
26.66	8	-
46.66	14	-
13.33	4	-
		:
50.00	4	-
--	--	-
50.00	4	-
--	--	-

(%100)

14
(%46.66)

8

.(%100)

.(%26.66)

4 - 3 1 8
 6 - 6 3
 10 - 9 6 (%50)
 8 - 12 9 .(%50)
 4 - 15 12
 22
 .(3) 10
 : 30 HP
 - 3 1
 6 - 6 3 30 18
 10 - 9 6
 10 - 12 9 62
 4 - 15 12 :
 :32 HP
 .(3)12 18

(3)

HP	HP	HP	HP	HP
--	--	4	--	3 1
6	--	4	2	6- 3
4	6	6	4	9-6
6	4	4	4	12-9
2	2	4	--	15-12
18	12	22	10	



6

10 :HP

8

18 32

6

6

32

(4)

HP :4

--	4	3-1
--	6	6-3
6	10	9-6
6	8	12-9
2	4	15-12
18	--	

16

) 10 22

.(5 6

28

.HP		:(5)
75.00	24	
12.50	4	
18.75	6	
87.50	28	
50.00	16	
31.25	10	
31.25	10	

12 :

:HP

24
4
.4
28
30 32 4
6
10 20
10

8

.(6)

14

4

HP

:(6)

--	--	3-1
--	6	6-3
4	10	9-6
8	10	12-9
4	4	12
14	--	

6

4

28

10

.(7) 8

22

30

.HP (7)

93.33	28	
20.00	6	
33.33	10	
100.00	30	
73.33	22	
20.00	6	
13.25	4	
6.66	2	
26.66	8	

10 . :

26 22 8

) HP 28
(8 20

HP : (9)

HP	HP
87.50	93.33
78.57	85.71
35.71	42.85
64.28	71.42
68.75	80.00
72.72	66.66
18.18	25.00
27.27	33.33
36.36	41.66
100.00	100.00
87.50	93.33
12.50	6.67
81.25	73.33

%42.58

%93.33

%35.71 HP

87.50 HP

HP

.HP

%85.71

%71.42

%78.57 HP

% 64.28 HP

.HP

.HP

HP

%100.00

HP

%80.00

HP

.HP

HP

HP

.HP

:

: (HP)

.(HP)

HP

·15 ·10 ·9 ·3)

.(29

HP

26 23 22 17 16 11 10 9)
. (39 35 28 27
:

.(40) HP

:

HP
HP

HP

HP

-
- 1- Anderson L.p., Holck .S., Paulsen C.O. Campylobacter pyloridis in peptic ulcer disease . 1: Gastric and duodenal infection caused by C. pyloridis. 2: Histopathologic and microbiologic findings // Scand.J. Gastroenterol .- 1987 . – Vol .22- P. 219-224 .
 - 2- Andreasen J.J. Andersen L.P. In vitro susceptibility of Campylobacter pyloridis to cimetidine , sucralfate , bismuth and sixteen antibiotics // Acta path . Microbiol . Scand – 1987- Vol. 95, N 2 – P. 147 – 149 .
 - 3- Arived A.S. , Cook R.S., Tabagchalis . One – minute endoscopy room test for Campylobacter pylorid // Lancet . – 1988 . – Vol . 1, N 8587 . P. 704 .
 - 4- Bernal Simon , Horst Kather // Digestion . – 1979 .- N 2 – p .137 – 139 .
 - 5- Benjamin D. Gold, Richard B. Colletti , Myles Abbot , et . All Helicobacter pylori infection in Children : Recommendations for Diagnosis Treatment // Journal of Pediatrics Gastroenterology and Nutrition – 2000 – Vol . 31, N 5 – P. 490 – 497 .
 - 6- Blaser M.J. Epidemiology and pathophysiology of Campylobacter pylori infections// Rev. Infect . Dis. – 1990 – Bd. 12 , N 1.-S.99-100.
 - 7- Blaser M.J. Gastric Campylobacter – Like Organisms , gastritis and peptic ulser disease // Gastroenterology .- 1987 – Vol . 93, N 2. – P. 371-383 .
 - 8- Blaser M.J., Duncan D.G. Human serux antibody response to Campylobacter jejuni infection as measured in an enzyme- linked immunosorbent assay // Infect . Immun . 1984.- Vol. 44, N 2. – P. 292 – 296 .
 - 9- Bode G., Malferthainer p., Ditschuneit H. Clinical importance Campylobacter pyloridis and associated serum IgG and serum IgA antibody responses in patients under going upper gastrointestinal endoscopy // Ibid.- 1988- Suppi . 142-P 25-33.
 - 10- Booth L., Holdstock G. , Me 3ride H. et.al . Clinical importance of Campylobacter pyloridis in patients under going upper gastrointestinal endoscopy //J Clin, Pathol . 1986 – Vol. 39- P. 215- 219 .

- 11- Bornschein H., Heilmann V.L., Bauernfeind A. Intra-gastrale Ammoniakbildung Bei Helicobacter pylori associierter Gastritis // Med. Klin. - 1989 – Bd. 84, N7. S.329- 332 .
- 12- Chipezynski Y. Animal model of Helicobacter pylori infection // Antimicrob. Agents Chemother.- 1990 – Vol. 34 , N 7 . 1462p.
- 13- Czinn S.J., Carr H. Rapid diagnosis of Campylobacter pyloridis – associated gastritis// J. pediatr. - 1987. Vol 110 . P. 567-570 .
- 14- Dwyer B., Kaldor J., Tee W., Raios K. The prevalence of Campylobacter pylori in human populations .- Blackwell – oxford, 1989 . – P. 190-196 .
- 15- Elta G.H., Murphy R., Bentel E.M. et al , Campylobacter Pylori in patients with Ulcerative Symptoms and Endoscopic Evidence of Erosion // Amer. J. Gastroent. – 1989 . – Vol. 84, N 6.- P. 643- 646 .
- 16- Fich A . Does Helicobacter pylori colonize the gastric mucosa of Meckel's diverticulum // Mayo Clin . proc.-1990 .- Vol. 65, N 2 – P. 187 – 191 .
- 17- Friderike F. Tamar S., Tomas S ., and Christian P. Helicobacter pylori Infection in Recurrent Abdominal Pain // Journal of pediatrics Gastroenterology and Nutrition – 2000- Vol . 31 . N 4 – P . 424 – 427 .
- 18- Giacomo C., Fiocca R. et al . Helicobacter pylori infection and chronic Gastritis //J. Pediatric. Gastroenterology and Nutrition . – 1990 . – Vol . 11, N 3 . – P. 310- 316 .
- 19- Gill H.H Campylobacter pylori A new in gastro-duodenal disorders // physicians India . 1990 – Vol. 38, N 2 – P. 147-160.
- 20- Ginn S.J., Speck W.T. Campylobacter pylori : a new pathogen // J. Pediatr. - 1989 . Vol . 114 , N 4 , Part 1. – P. 670-672
- 21- Glasqman M.S. Helicobacter pylori – related gastro-duodenal disease in children // Dig .Dis.Sci. – 1990 – Vol. 35 , N 8 – P. 993 – 997 .
- 22- Hansen W.F. Helicobacterium – induced delusions // Dtsch . Med. Machenscho – 1990 – Bd, 116 , N 33 – 1254 P.
- 23- Hassall E., Dimmick J. Unique Features of Helicobacter Pylori Disease in Children // Digestiv Disease and Sciences .- 1991. Vol. 36 , N 4 .- P. 417 – 423 .
- 24- Jones D.M., Lessells A.M., Eldridge j. Campylobacter – Like organism on the gastric mucosa // J. Clin . path .- 1984 .- Vol . 37 , N 9 .- P. 1002 – 1006 .

-
- 25- Kern S.E., Yardley J.H., Kafonek D.R. et al . Three cases of gastric spirochete like organisms // *Gastroenterol* . – 1989 . – Vol. 96 . – P . 266- 268 .
 - 26- Lamouliatte H., Megreud F., De Mascarel A. et al. // *Campylobacter pyloridis* and epigastric pain // *Gastroenterology : Clin . Biol . 2* . – 1987 . – P. 212 – 216 .
 - 27- Levi B. Antral helicobacter pylori and duodenal ulcers// *B.M.J.*- 1989.- Vol. 299, N 6714 .- P. 1504 – 1505 .
 - 28- Loffeld R. , Potters H. Helicobacter – associated gastritis// *Gut* . – 1989 . – Vol . 30 , N 9 .- P. 1206- 1212 .
 - 29- Loffeld R. Stobbering E. Flendrig J . Helcobacter pylori in gastric biopsy speclmens // *J. Pathol* .- 1991 . Vol . 165 .- p. 69 – 73 .
 - 30- Marshall B. Unidentified curved bacilli on gastric epithelium // *Lancet* .- 1984 . – P. 1311 – 1315 .
 - 31- Marshall B. Boodurin C. Revised nomenclature of *Campylobacter pyloridis* // *Int . F. Syst . Bacteriol.*- 1987 . Vol . 37
 - 32- Marshall B., Plankey M., Hoffman S. et al . A 20- Minute Breath Test for Helicol pylori // *Amer . J. Gastroenterol* .- 1991 .- Vol . 86 , N 4 – P. 438 – 445 .
 - 33- Misiewicz J.J., Tytgat G.N.Y., Goodwin C.s. et al . The Sydney system : a new classification of gastritis .- 9th congress of gastroenterology . Working party reports . – Blackwell .- Melburne , 1990 .- p. 1-10 .
 - 34- Nichols L. , Sughayer M. De Girolami P. Evaluation of Diagnostic Methods for helicobacter pylori gastritis // *Amer . J, Clin . Pathol* .- 1991 .- Vol . 95, N 6 .- P. 769-773 .
 - 35- Oderda G., Vatra D., Holton J. et al. Non – specific abdominal pain in children // *Gut*.- 1988.- Vol. 29 – 1475 P.
 - 36- Pereza – Pereza G. , Taylor D. wongsrichanalai L. et al . Seroprevalqnce of Helicobacter pylori infections in Thailand .- *J. Infect. Dis.*- 1990 .- Vol. 161.- P 1237- 1241 .
 - 37- Rauws E. Tytgat G. *Campylobacter pylori* .- Amstersam , 1989 . Reina J., Salva F., Alomar P.// *Rev. Esp . Enferm . Apar . digest* .- 1989 .- Vol . 76 , N 2 , P . 151 – 154 .
 - 38- Steer H. Newell D. Immunological Indentification of *Campylobacter* // *Lancet* . – 1986 . 38 P .

-
- 39- Tytgat G., Axon A. Dixon D. et al . Nodular gastritis and Helicobacter pylori // world Congress of Gastroenterology .- Sydney , 1990 – P. 36 – 45 .
 - 40- Varoll O., Landini M. Tucci A., Corinaldesi R. Presence of Helicobacter in gastric juice// Amer .J. Gastroenterol .- 1991.- Vol. 86 , N 2 . – 249 P .
 - 41- Warren G. Unidentified currel bacilli on gastric epithelium // Lancet . 1983 – 1237 P.
 - 42- Warren J. Diagnostic Campylobacter – associated gastritis // pediatri .- 1987 .- Vol . 110 , N 4 .- P. 569 – 570 .

.2005/4/13:

.2005/8/7: