

Results

Table (1) Means \pm SD of ages among the study groups.

Study group \ Age	\pm SD	t	p
Cases n = 30	37.7 \pm 12.1	0.92	> 0.05
Control n = 10	33.9 \pm 10.9		

- P value > 0.05 insignificant.
- 30 cases of ulcerative colitis with mean age 37.7 and 10 controls with mean age 33.9

Table (2): Means \pm SD of different variables among the study groups.

Variable	Study group	\pm SD	t	p	Significance
HB	Cases	10.8 \pm 1.4	6.33	< 0.001	Highly significant
	Control	13.1 \pm 0.8			
WBCs	Cases	9600.7 \pm 2363.6	8.29	< 0.001	Highly significant
	Control	5590 \pm 765.9			
Platelets	Cases	167.200 \pm 28.500	1.85	> 0.005	Non significant
	Control	180.000 \pm 14.200			
ESR	Cases	60.3 \pm 25.6	1.5	< 0.001	Highly significant
	Control	15 \pm 2.8			
Creatinine	Cases	0.98 \pm 0.28	0.211	> 0.05	Non significant
	Control	1.00 \pm 0.211			
SGPT	Cases	28.97 \pm 8.8	2.78	< 0.01	Significant
	Control	20.4 \pm 8.3			

Table (3): Colonoscopic exam among the study groups.

Colonoscopy Study group	No gross lesion		Gross lesion		Total	
	No	%	No	%	No	%
Cases	1	3.3	29	96.7	30	100.0
Control	10	100.0	0	0	10	100.0
Total	11	27.5	29	72.5	40	100.0

Corrected $\chi^2 = 25.6$ $p < 0.001$

- P value < 0.001

- This table shows the results of colonoscopic examination among the study groups with high significant difference between cases and controls.

(**Gross lesion:** mucosal ulcers, polyps, abnormal vascularity or masses)

Table (4): Upper endoscopic exam among the study groups.

upper endoscopy Study group	Gross lesion		Gross lesion		Total	
	No	%	No	%	No	%
Cases	9	30.0	21	70.0	30	100.0
Control	7	70.0	3	30.0	10	100.0
Total	16	40.0	24	60.0	40	100.0

Corrected $\chi^2 = 5.0$ $p < 0.05$

- P value < 0.05 .

- This table shows the results of upper endoscopic examination among the study groups with significant difference between cases and controls.

Table (5): Histopathological examination of gastric biopsy for *H. pylori* among the study groups.

Gastric exam. Study group	H. pylori + ve		H. pylori - ve		Total	
	No	%	No	%	No	%
Cases	11	36.7	19	63.3	30	100.0
Control	0	0.0	10	100.0	10	100.0
Total	11	27.5	29	72.5	40	100.0

Corrected $\chi^2 = 5.06$

$p < 0.05$

- P value < 0.05

- This table shows the results of histopathological examination of gastric biopsy for *H. pylori* among the study groups with significant difference between cases and controls.

Table (6): Histopathological examination of colonic biopsy for *H. pylori*- like organisms among the study groups.

Colonic exam. Study group	+ ve		- ve		Total	
	No	%	No	%	No	%
Cases	6	20.0	24	80.0	30	100.0
Control	2	20.0	8	80.0	10	100.0
Total	8	20.0	32	80.0	40	100.0

Corrected $\chi^2 = 0.2$

$p > 0.05$

- P value > 0.05

- This table shows the results of histopathological examination of colonic biopsy for *H. pylori* like organism among the study groups with no significant difference between cases and controls.

Table (7): Means \pm SD of age and ESR among the patients group according to gastric examination for *H. pylori*.

Gastric examination Study group	Negative n = 19 $\bar{X} \pm SD$	Positive n = 11 $\bar{X} \pm SD$	t	p
Age	25.5 \pm 9.6	41.2 \pm 15.5	1.1	> 0.05
ESR	62.9 \pm 23.6	57.4 \pm 23.5	0.62	> 0.05

- This table shows Mean \pm SD of age and ESR among the cases according to gastric examination for *H. pylori* with no significant difference between both.

Table (8): Means \pm SD of age and ESR among the patients group according to colonic examination for *H. pylori* like organism.

Colonic examination Study group	-ve n = 24 $\bar{X} \pm SD$	+ve n = 6 $\bar{X} \pm SD$	t	p
Age	39.8 \pm 12.4	29 \pm 5.9	3.09	< 0.01
ESR	61.7 \pm 25.9	57.7 \pm 5.8	0.69	> 0.05

- This table shows Mean \pm SD of age and ESR among the cases according to colonic examination for *H. pylori*-like organisms with significant increase of age in cases with negative results (39.8) than in cases with positive results (29).

Table (9): Distribution of patients according to sex and gastric examination for *H. pylori*.

Sex Gastric exam.	Males		Females		Total		Z	p
	No	%	No	%	No	%		
Negative	14	73.7	5	26.3	19	100.0	2.35	< 0.05
Positive	5	45.4	6	54.6	11	100.0	0.31	> 0.05
Total	19	63.3	11	36.7	30	100.0		

Corrected $\chi^2 = 1.33$

$p > 0.05$

- This table shows distribution of patients according to sex and gastric examination for *H. pylori* with no significant statistical value.

Table (10): Distribution of patients according to sex and colonic examination for *H. pylori*- like organisms.

Sex Colonic exam.	Males		Females		Total		Z	p
	No	%	No	%	No	%		
-ve	15	62.5	9	37.5	24	100.0	1.27	> 0.05
+ve	4	66.7	2	33.3	6	100.0	0.87	> 0.05
Total	19	63.3	11	36.7	30	100.0		

Corrected $\chi^2 = 0.08$

$p > 0.05$

- This table shows distribution of patients according to sex and colonic examination for *H. pylori*- like organisms with no significant statistical value.

Table (11): Distribution of patients according to diarrhea and gastric examination for *H. pylori*.

Diarrhea Gastric exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
H. pylori -ve	7	36.8	12	63.2	19	100.0	1.19	> 0.05
H. Pylori +ve	4	36.4	7	63.6	11	100.0	0.94	> 0.05
Total	11	36.7	19	63.3	30	100.0		

Corrected $\chi^2 = 0.14$

$p > 0.05$

- This table shows distribution of patients according to diarrhea and gastric examination for *H. pylori* with no significant statistical value.

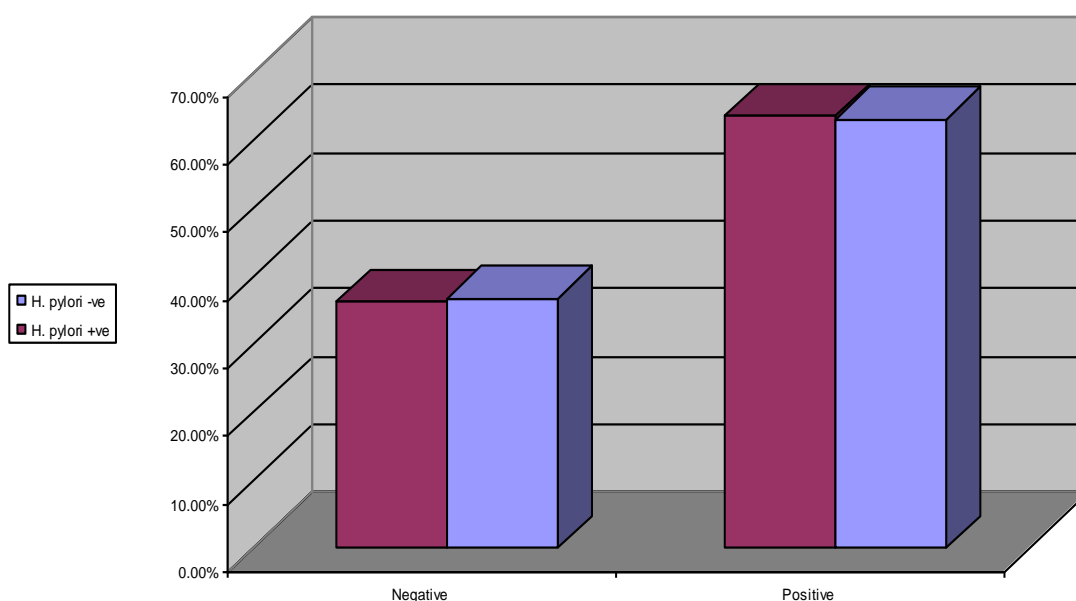


Figure (1): Distribution of patients according to diarrhea and gastric examination for *H. pylori*.

Table (12): Distribution of patients according to diarrhea and colonic examination for *H. pylori*- like organisms.

Diarrhea Colonic exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
-ve	7	29.2	17	70.8	24	100.0	2.24	< 0.05
+ve	4	66.7	2	33.3	6	100.0	0.87	> 0.05
Total	11	36.7	19	63.3	30	100.0		

Corrected $\chi^2 = 1.52$

$p > 0.05$

- This table shows distribution of patients according to diarrhea and colonic examination for *H. pylori*- like organisms with no significant statistical value.

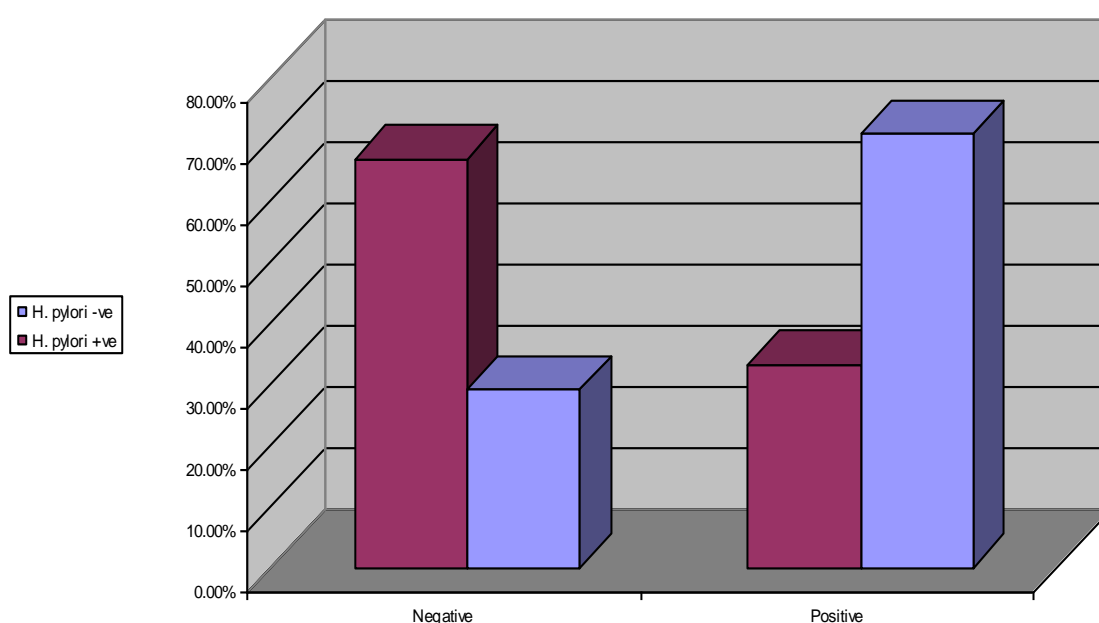


Figure (2): Distribution of patients according to diarrhea and colonic examination for *H. pylori*- like organisms.

Table (13): Distribution of patients according to abdominal pain and gastric examination for *H. pylori*.

Abd. pain Gastric exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
H. pylori –ve	4	21.1	15	78.9	19	100.0	3.09	< 0.01
H. Pylori +ve	2	18.2	9	81.8	11	100.0	2.73	< 0.01
Total	6	20.0	24	80.0	30	100.0		

Corrected $\chi^2 = 0.08$

$p > 0.05$

- This table shows distribution of patients according to abdominal pain and gastric examination for *H. pylori* with no significant statistical value.

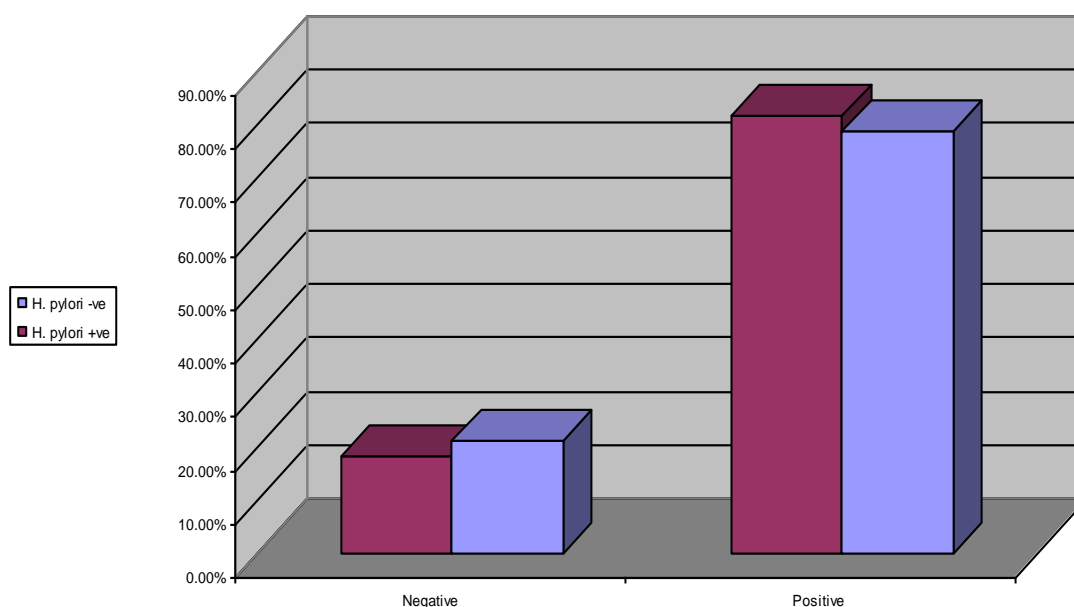


Figure (3): Distribution of patients according to abdominal pain and gastric examination for *H. pylori*.

Table (14): Distribution of patients according to abdominal pain and colonic examination for *H. pylori*- like organisms.

Abd. pain Colonic exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
-ve	4	16.7	20	83.3	24	100.0	4.37	< 0.001
+ve	2	33.3	4	66.7	6	100.0	0.87	> 0.05
Total	6	20.0	24	80.0	30	100.0		

Corrected $\chi^2 = 0.12$

$p > 0.05$

- This table shows distribution of patients according to abdominal pain and colonic examination for *H. pylori*-like organisms with no significant statistical value.

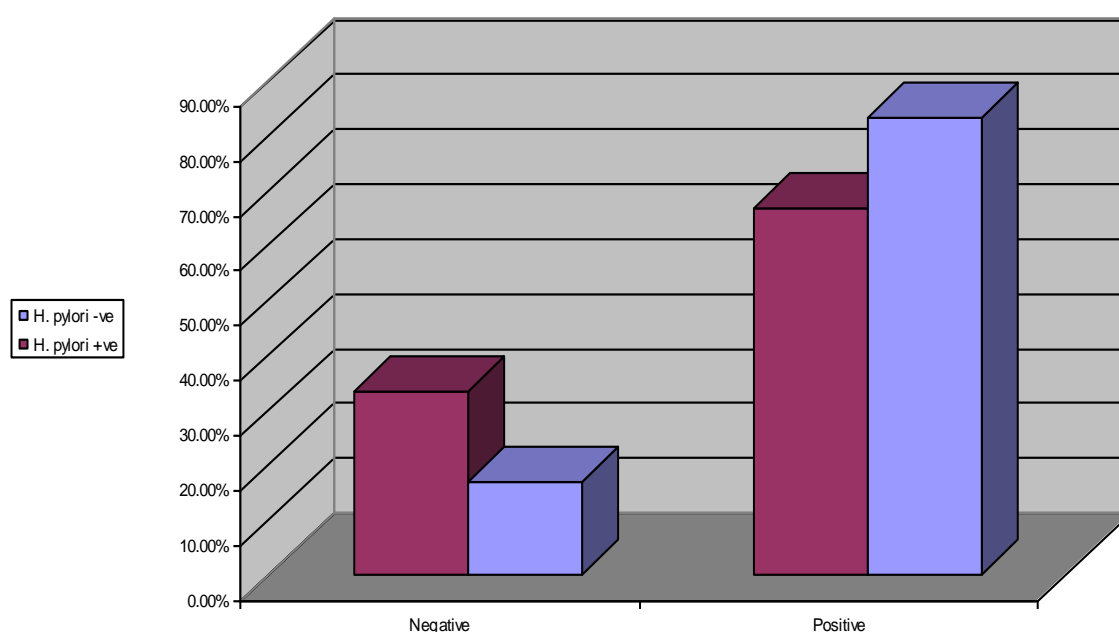


Figure (4): Distribution of patients according to abdominal pain and colonic examination for *H. pylori*- like organisms.

Table (15): Distribution of patients according to bleeding per rectum and gastric examination for *H. pylori*.

BPR \ Gastric exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
H. pylori –ve	3	15.8	16	84.2	19	100.0	4.09	< 0.001
H. Pylori +ve	1	9.1	10	90.9	11	100.0	4.72	< 0.001
Total	4	13.3	26	86.7	30	100.0		

Corrected $\chi^2 = 0.001$

$p > 0.05$

- This table shows distribution of patients according to BPR and gastric examination for *H. pylori* with no significant statistical value.

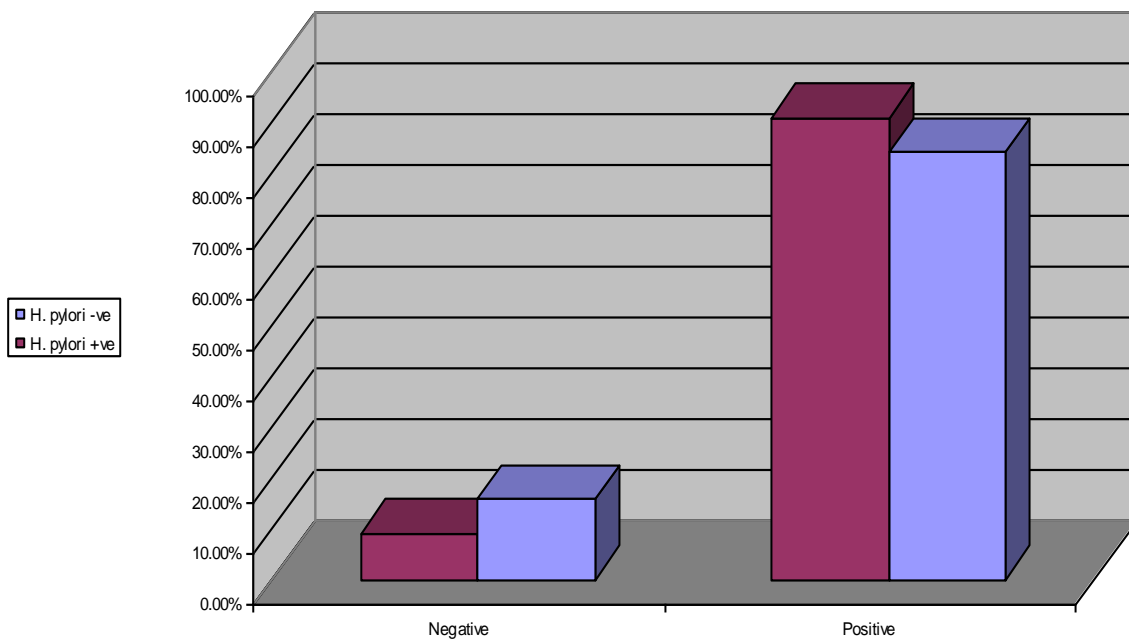


Figure (5): Distribution of patients according to BPR and gastric examination for *H. pylori*.

Table (16): Distribution of patients according to bleeding per rectum and colonic examination for *H. pylori*- like organisms.

BPR Colonic exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
-ve	4	16.7	20	83.3	24	100.0	4.37	< 0.001
+ve	0	0.0	6	100.0	6	100.0	1.1	> 0.05
Total	16	53.3	14	46.7	30	100.0		

Corrected $\chi^2 = 0.16$

$p > 0.05$

- This table shows distribution of patients according to BPR and colonic examination for *H. pylori*-like organisms with no significant statistical value.

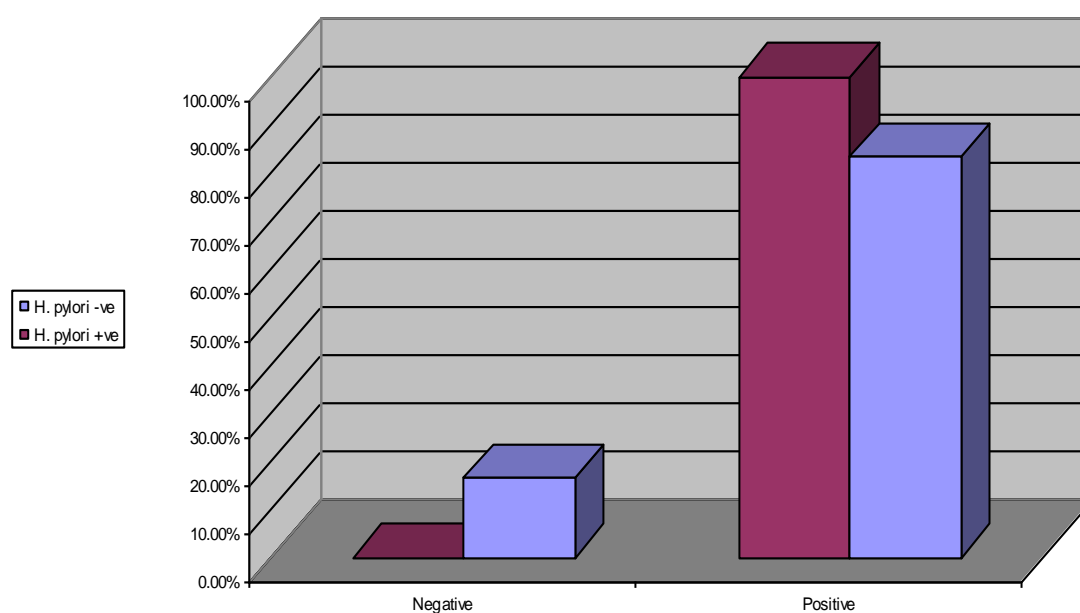


Figure (6): Distribution of patients according to BPR and colonic examination for *H. pylori*- like organisms.

Table (17): Distribution of patients according to disease activity and gastric examination for *H. pylori*.

Disease activity Gastric exam.	Mild		Severe		Total		Z	P
	No	%	No	%	No	%		
+ve	7	63	4	37	11	100	1.18	> 0.05
-ve	13	68	6	32	19	100	0.96	> 0.05
Total	20	66.5	10	33.5	30	100		

Corrected $X^2 = 0.13$

$p > 0.05$

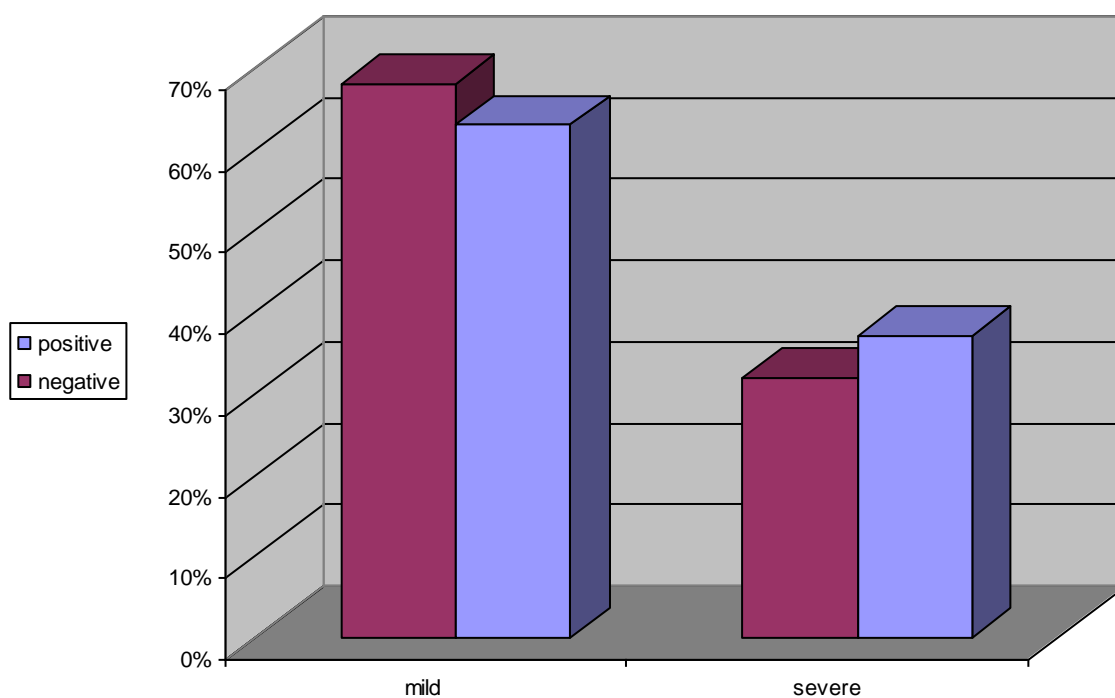


Figure (7): Distribution of patients according to disease activity and gastric examination for *H. pylori*.

Table (18): Distribution of patients according to disease activity and colonic examination for *H. pylori*- like organisms.

Disease activity Colonic exam.	Mild		Severe		Total		Z	P
	No	%	No	%	No	%		
+ ve	5	83	1	17	6	100.0	4.35	< 0.001
- ve	15	68.5	9	31.5	24	100.0	0.85	> 0.05
Total	20	66.5	10	33.5	30	100.0		

Corrected $X^2 = 0.11$

$p > 0.05$

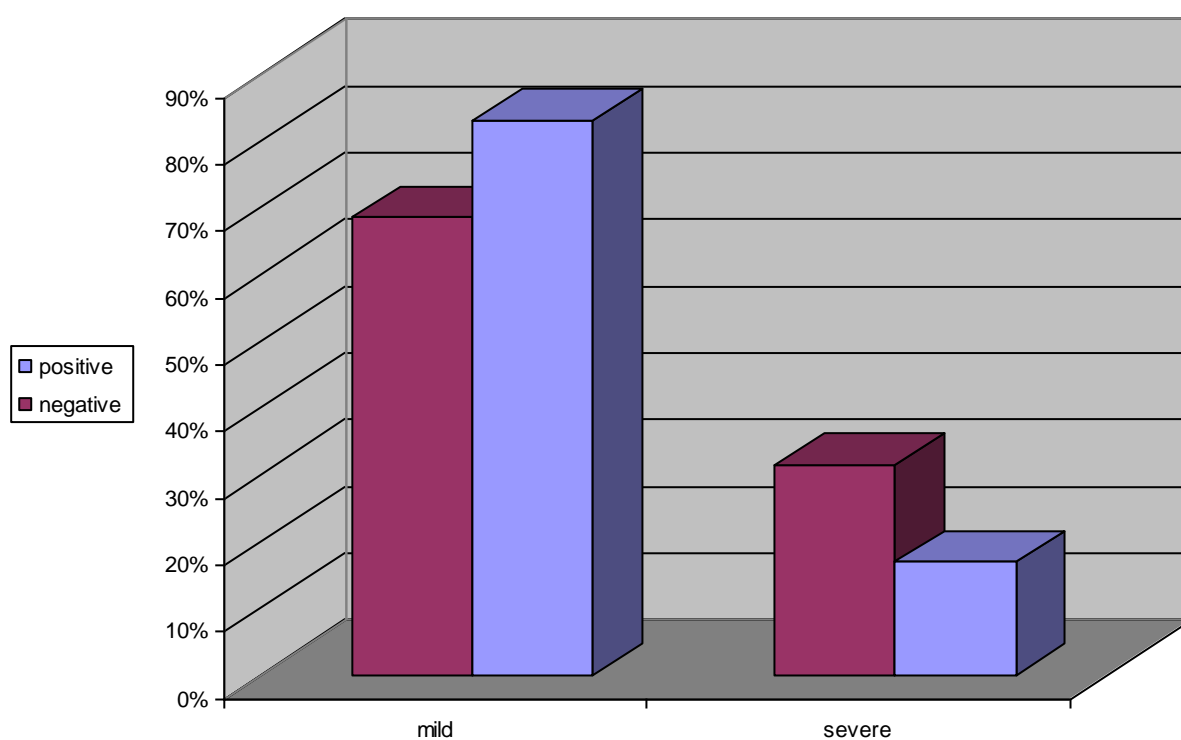


Figure (8): Distribution of patients according to disease activity and colonic examination for *H. pylori*- like organisms.

Table (19): Distribution of patients according to extra intestinal manifestations and gastric examination for *H. pylori*.

Extra intestinal Gastric exam.	- ve		+ ve		Total		Z	P
	No	%	No	%	No	%		
H. pylori –ve	12	63.2	7	36.8	19	100.0	1.19	> 0.05
H. Pylori +ve	4	36.4	7	63.6	11	100.0	0.94	> 0.05
Total	16	53.3	14	46.7	30	100.0		

Corrected $\chi^2 = 1.08$

$p > 0.05$

- This table shows distribution of patients according to extra intestinal and gastric examination for *H. pylori* with no significant statistical value.

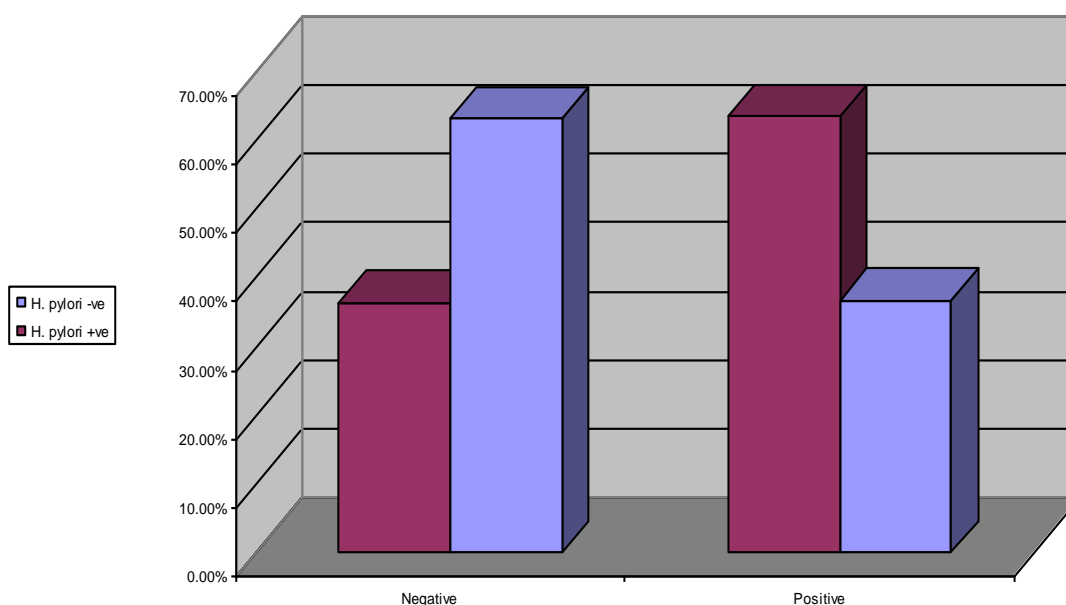


Figure (9): Distribution of patients according to extra intestinal manifestations and gastric examination for *H. pylori*.

Table (20): Distribution of patients according to extra intestinal manifestations and colonic examination for *H. pylori*- like organisms.

Extra intestinal Colonic exam.	- ve		+ ve		Total		Z	p
	No	%	No	%	No	%		
-ve	12	50.0	12	50.0	24	100.0	-	-
+ve	4	66.7	2	33.3	6	100.0	0.87	> 0.05
Total	16	53.3	14	46.7	30	100.0		

Corrected $\chi^2 = 0.08$

$p > 0.05$

- This table shows distribution of patients according to extra intestinal and colonic examination for *H. pylori*-like organisms with no significant statistical value.

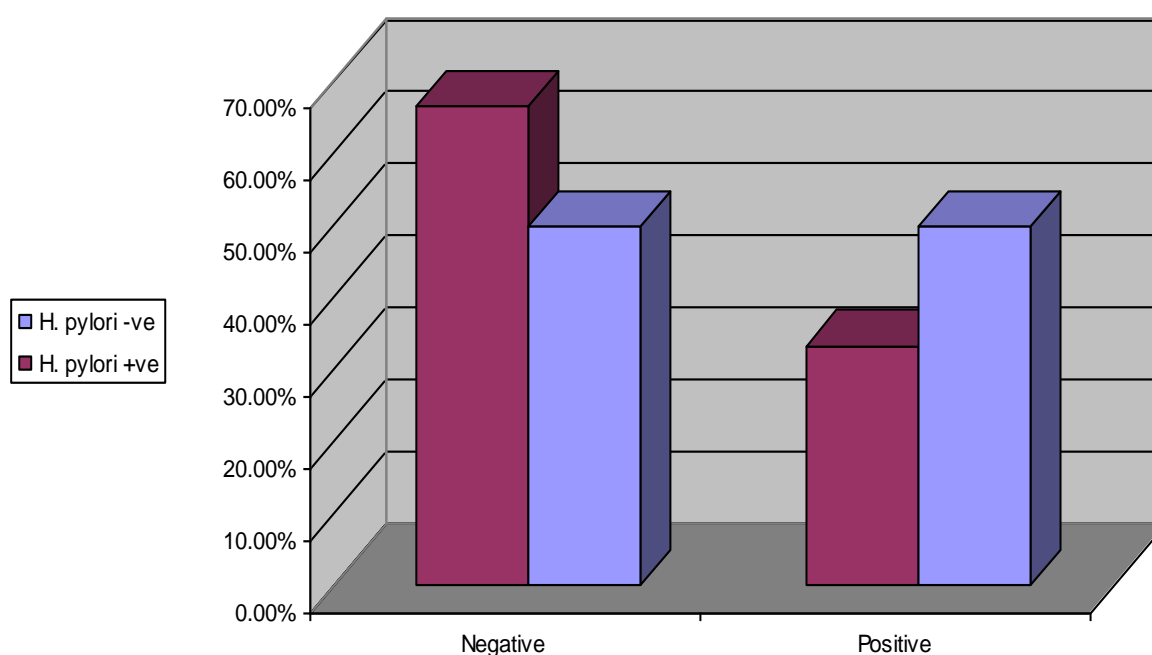


Figure (10): Distribution of patients according to extra intestinal manifestations and colonic examination for *H. pylori*- like organisms.

Table (21): Means \pm SD of different variables among the study cases according to *Helicobacter* positive cases by gastric and colonic examination.

Helicobacter + ve cases Variable	Gastroscopy n = 11 $\bar{X} \pm SD$	Colonoscopy n = 6 $\bar{X} \pm SD$	t	p
Age	41.2 \pm 15.5	39.8 \pm 12.4	0.20	> 0.05
HB	10.2 \pm 1.6	10.9 \pm 1.04	1.09	> 0.05
RBCs	3.8 \pm 0.6	3.93 \pm 0.8	0.35	> 0.05
WBCs	9818.2 \pm 1894.6	10266.7 \pm 2555.5	0.38	> 0.05
Platelets	168455 \pm 21773.2	177333.3 \pm 19106.7	0.87	> 0.05
ESR	57.4 \pm 23.5	57.7 \pm 5.8	0.04	> 0.05
Creatinine	0.98 \pm 0.2	0.93 \pm 0.2	0.49	> 0.05
SGPT	27.4 \pm 7.5	31 \pm 4.7	1.21	> 0.05

This table shows the Mean \pm SD of different variables among the study cases according to positivity of *Helicobacter* in gastric and colonic samples with no significant statistical value.

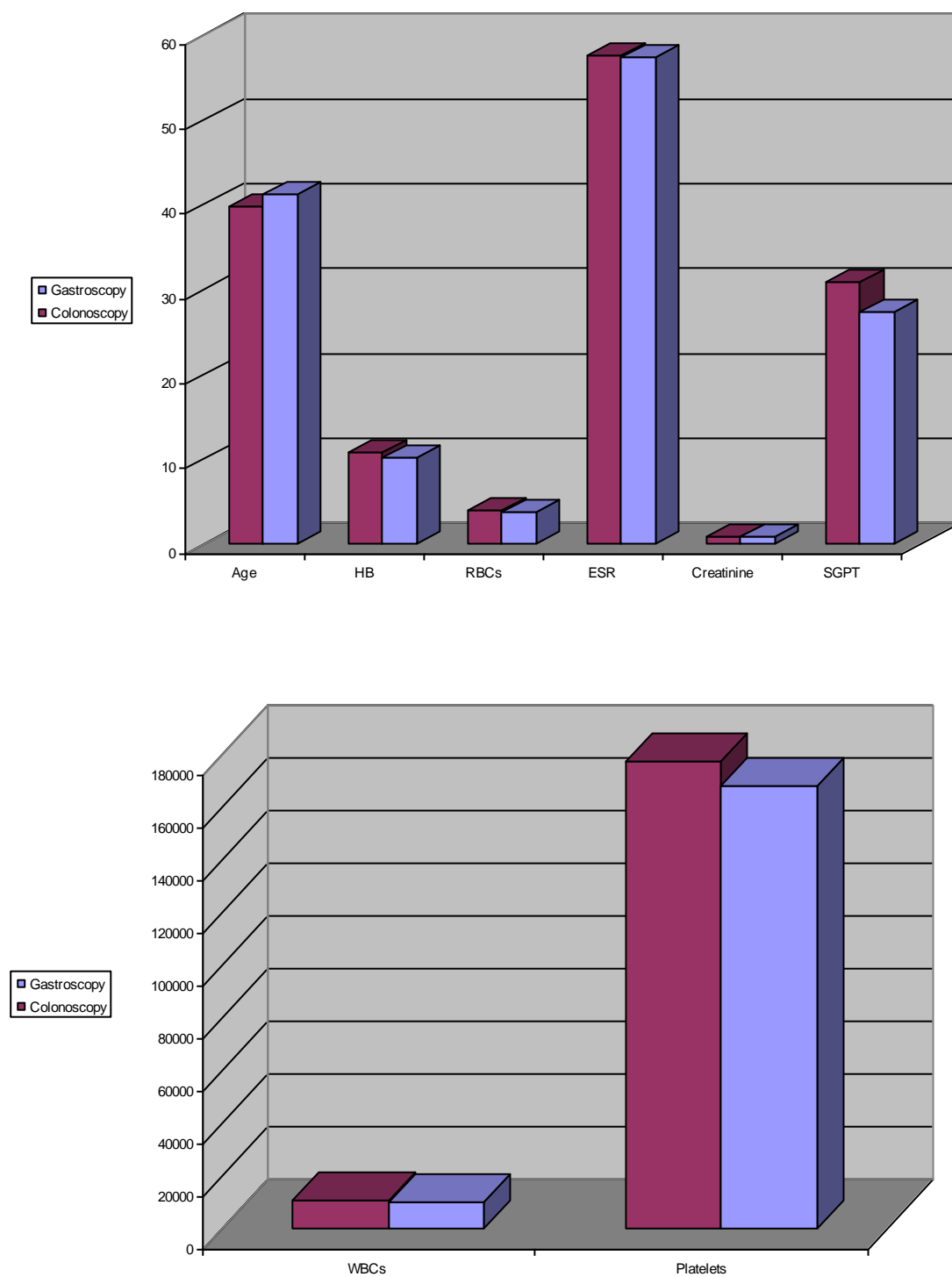


Figure (11): Means \pm SD of different variables among the study cases according to *Helicobacter* + ve cases by gastric and colonic examination.

Table (22): Distribution of *H. pylori*- like organisms in colonic mucosa among gastric positive cases for *H.pylori*.

Gastric positive samples Colonic samples	No = 11	%
+ ve	6	54.5
- ve	5	45.5

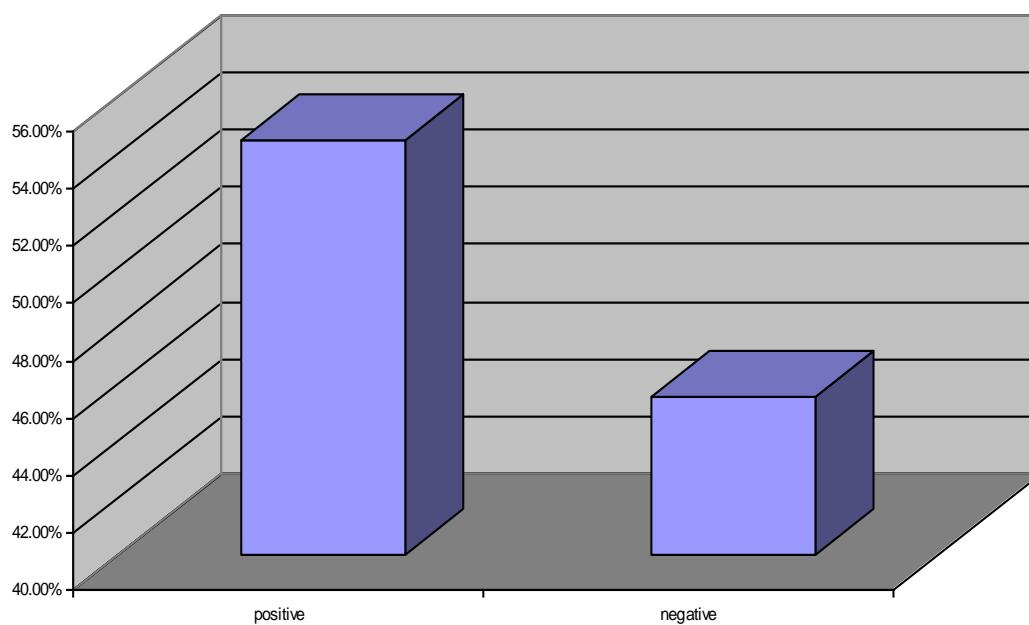


Figure (12): Distribution of *H. pylori*- like organisms in colonic mucosa among gastric positive cases for *H.pylori*.

Table (23): Distribution of *H. pylori* in gastric mucosa among positive colonic cases for *H.pylori*- like organisms.

Colonic positive samples Gastric samples	No = 6	%
+ ve	6	100
- ve	0	-

- All colonic + ve cases for *H.pylori*- like organisms are gastric +ve for *H. pylori*.

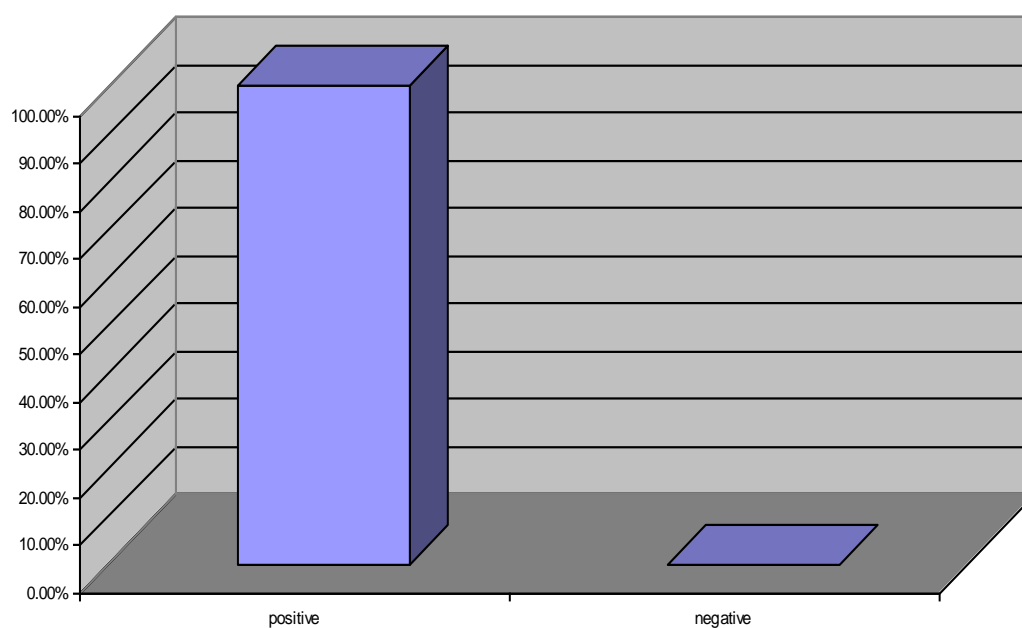


Figure (13): Distribution of *H. pylori* in gastric mucosa among positive colonic cases for *H.pylori*- like organisms.

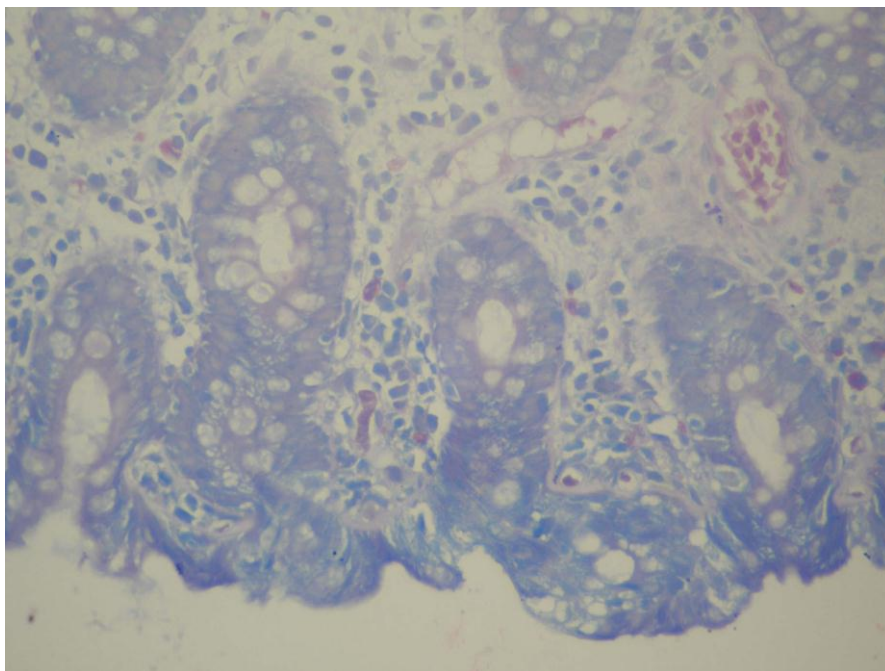


Figure (14): control colonic mucosa, Giemsa stain (1000).

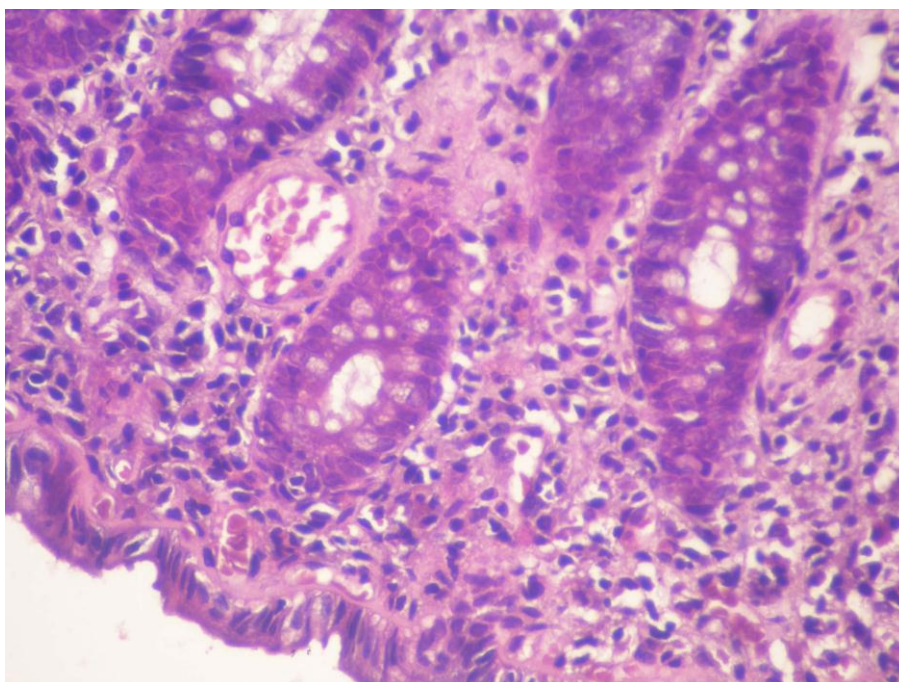


Figure (15): Control colonic mucosa, H & E stain (1000).

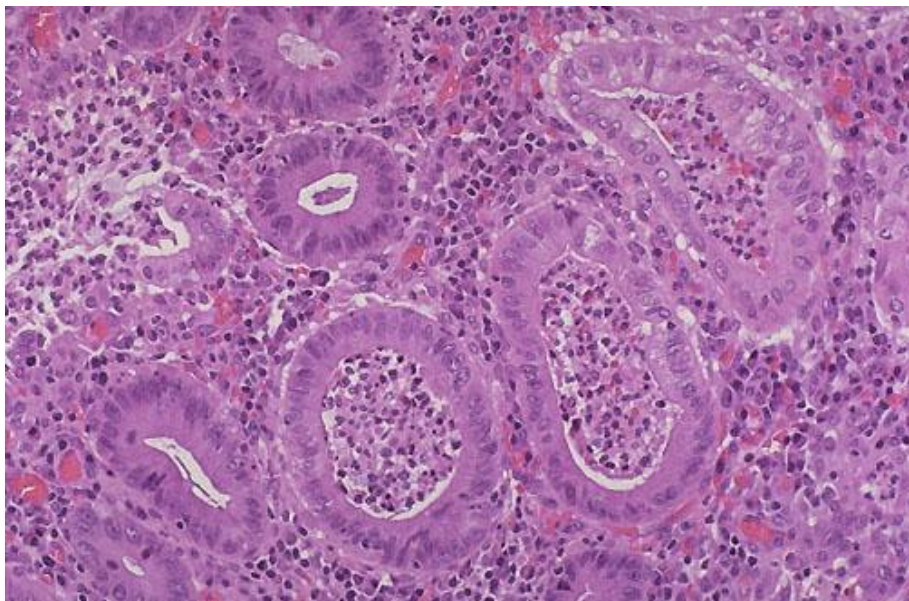


Figure (16): Control gastric mucosa H & E stain (400).

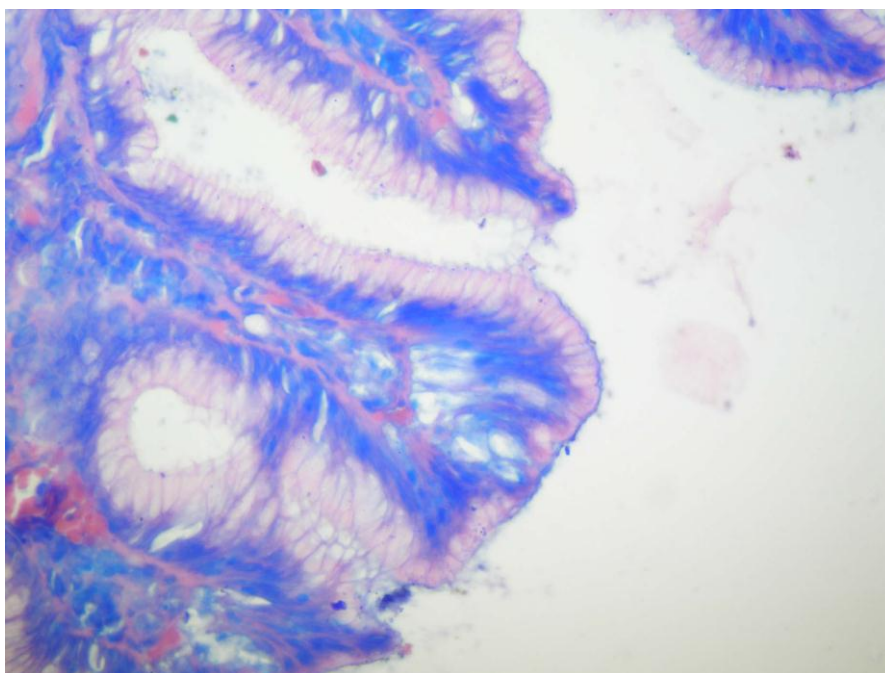


Figure (17): control gastric mucosa, Giemsa stain (1000).

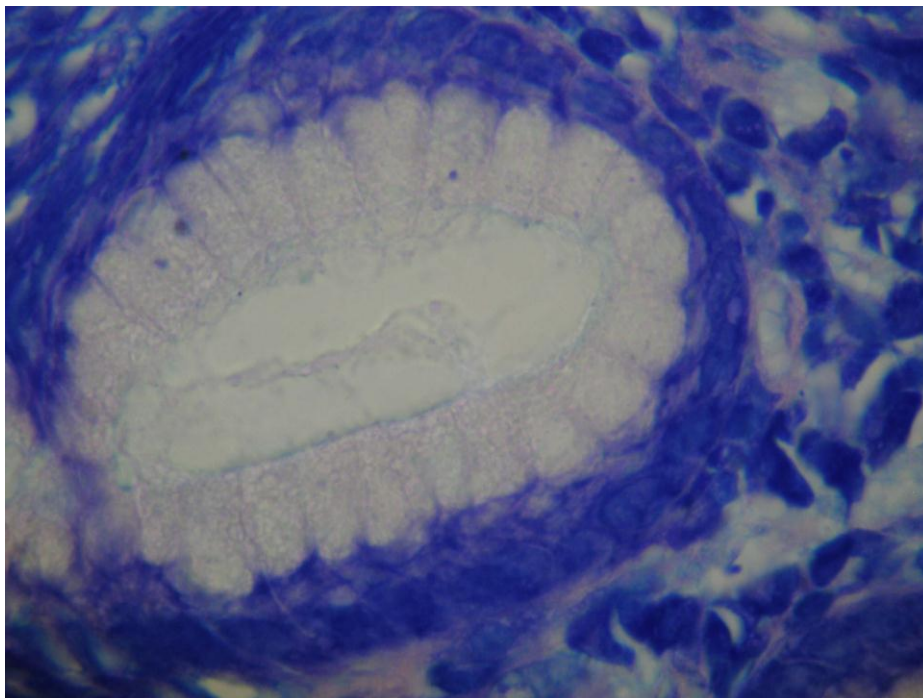


Figure (18): Chronic non H. pylori gastritis, Giemsa stain (1000).

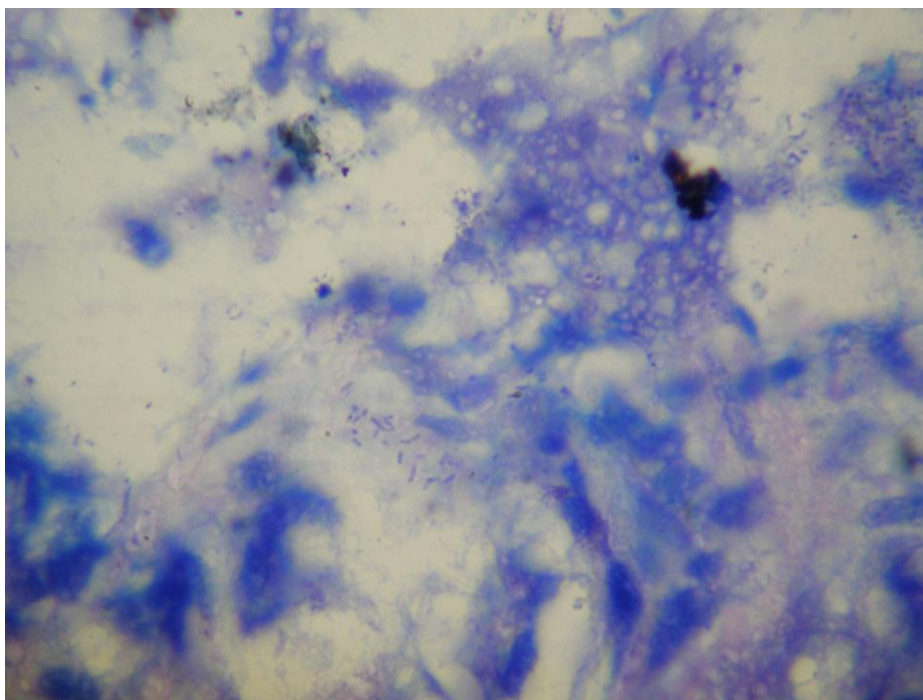


Figure (19): H. pylori gastritis, Giemsa stain (1000).

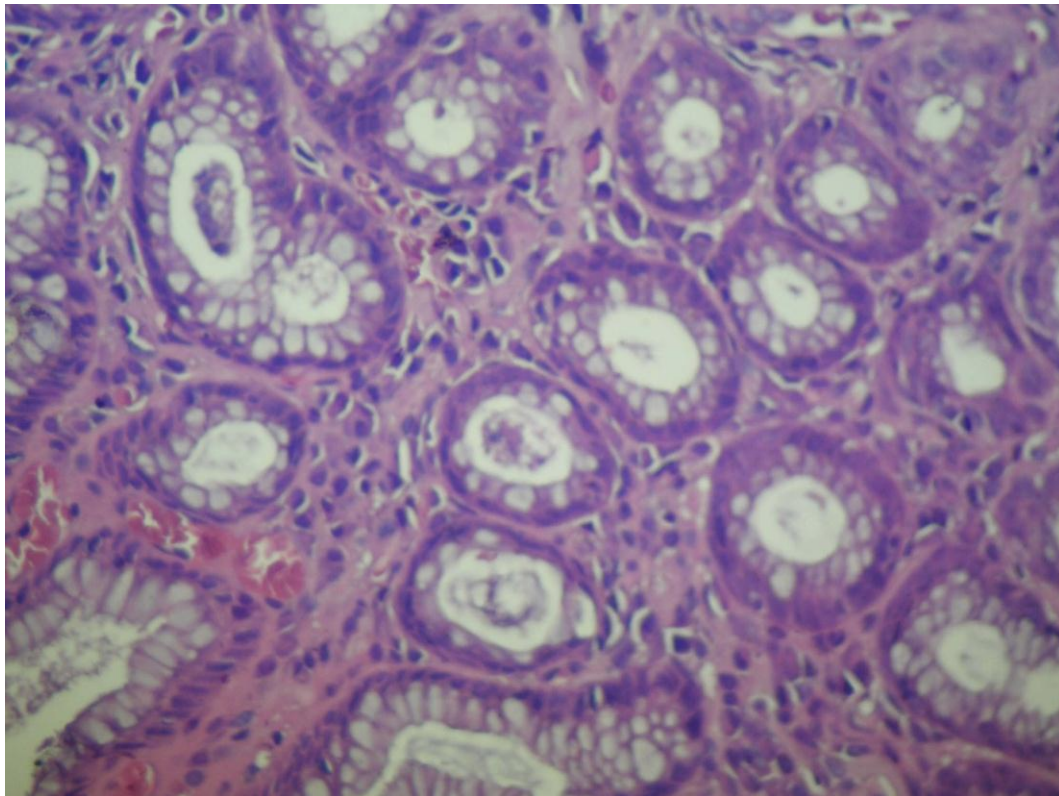


Figure (20): Ulcerative colitis under treatment, H & E stain (1000).

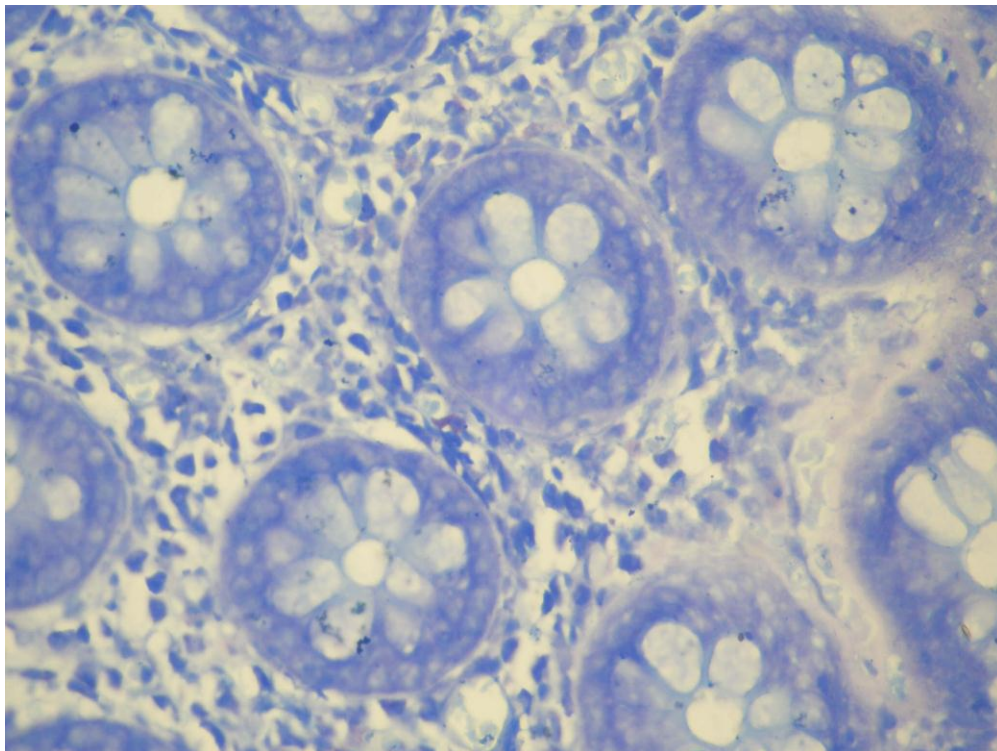


Figure (21): Ulcerative colitis under treatment, Giemsa stain (1000).

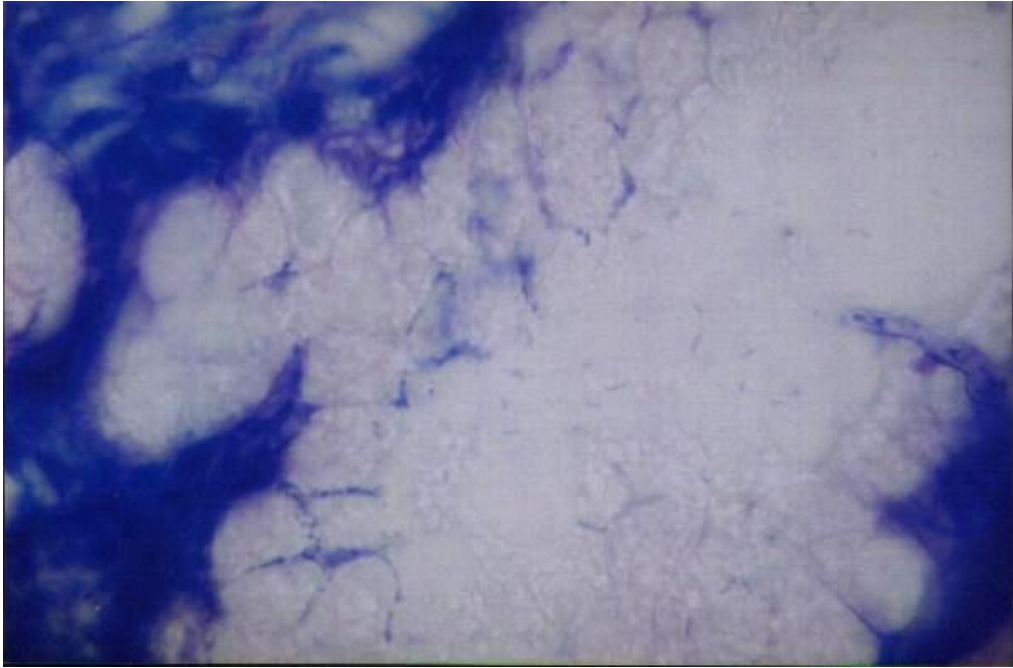


Figure (22): Ulcerative colitis with H. pylori-like organisms, Giemsa stain (1000).