

LIST OF TABLES

Table	page
(1) Primers used for the amplification of vacA alleles and cag A	20
(2) Comparison between the studied groups according to demographic data	23
(3) Comparison between symptomatic H. pylori positive and symptomatic H. pylori negative according to clinical presentation	24
(4) Characteristics of abdominal pain in Symptomatic H. pylori positive and Symptomatic H. pylori negative children	25
(5) Comparison between symptomatic H. pylori positive and symptomatic H. pylori negative children according to endoscopic findings	26
(6) Comparison between symptomatic H. pylori positive and symptomatic H. pylori negative according to histopathological findings in the antrum	31
(7) Relation between vomiting and the endoscopic picture among symptomatic H. pylori positive children (n=50)	32
(8) Relation between abdominal pain and endoscopic picture among symptomatic H. pylori positive children (n=50)	33
(9) Relation between hematemsis and the endoscopic picture among symptomatic H. pylori positive children (n=50)	34
(10) Relation between vomiting and the histopathology among symptomatic H. pylori positive children (n=50)	35
(11) Relation between abdominal pain and the histopathology among symptomatic H. pylori positive children (n=50)	36
(12) Relation between hematemsis and the histopathology among symptomatic H. pylori positive children (n=50)	37
(13) Distribution of the H. pylori positive cases according to the studied genes (n = 75)	39
(14) Comparison between symptomatic H. pylori positive cases and asymptomatic H. pylori positive children according to genes (n=75)	43
(15) Relation between hematemsis and different genotypes among H. pylori positive children (n=75)	44
(16) Relation between vomiting with different genotypes among H. pylori positive children (n=75)	45
(17) Relation between abdominal pains with different genotypes among H. pylori positive children (n=75)	46
(18) Relation between CagA status and endoscopic findings among symptomatic H. pylori positive children (n=50)	48
(19) Relation between VacA s1 status and endoscopic findings among	49

Table	page
	symptomatic H. pylori positive children (n=50)
(20)	50 Relation between VacA s2 status and endoscopic findings among symptomatic H. pylori positive children (n=50)
(21)	51 Relation between VacA m1 status and endoscopic findings among symptomatic H. pylori positive children (n=50)
(22)	52 Relation between VacA m2 status and endoscopic findings among symptomatic H. pylori positive children (n=50)
(23)	53 Relation between S1/M1 status and endoscopic findings among symptomatic H. pylori positive children (n=50)
(24)	54 Relation between Vac A alleles and endoscopic findings among symptomatic H. pylori positive children (n=50)
(25)	55 Relation between babA2 status and endoscopic findings among symptomatic H. pylori positive children (n=50)
(26)	57 Relation between CagA status and histopathological findings among symptomatic H. pylori positive children (n=50)
(27)	58 Relation between VacA s1 status and histopathological findings among symptomatic H. pylori positive children (n=50)
(28)	59 Relation between VacA s2 and histopathological findings among symptomatic H. pylori positive children (n=50)
(29)	60 Relation between VacA m1 and pathological findings among symptomatic H. pylori positive children (n=50)
(30)	61 Relation between VacA m2 status and pathological findings among symptomatic H. pylori positive children (n=50)
(31)	62 Relation between S1/M1 status and pathological findings among symptomatic H. pylori positive children (n=50)
(32)	63 Relation between Vac A alleles and histopathological finding among symptomatic H. pylori positive children
(33)	64 Relation between babA2 status and histopathological findings among symptomatic H. pylori positive children (n=50)
(34)	65 Comparison between the symptomatic H. pylori positive cases and the asymptomatic children according to triple positive gene combination

LIST OF FIGURES

Figure		Page
(1)	The natural history of <i>H. pylori</i> infection can be thought of in two phases	8
(2)	The inflammatory infiltrate was seen limited to the upper gastric mucosa in superficial cases (a) and extending beyond the gastric pits (b) in the deep cases. (H&E, x100)	28
(3)	Eosinophils are seen (a) marginating in the blood vessels (x400) and (b) in the lamina propria (x200). (H&E).	29
(4)	Signs of activity were seen in the form of a neutrophilic infiltrate (a) in the lamina propria and (b) infiltrating the glandular epithelium. (H & E x200)	30
(5)	Lymphoid follicles with reactive germinal centers in the mucosa.(H&E, x100)	31
(6)	2% agarose gel electrophoresis showing 296 bp PCR products of the glmM (UreC) gene (lanes 3, 4 and 5). Lane 1 shows 100 bp molecular weight marker (Fermentas)	40
(7)	2% agarose gel electrophoresis showing PCR products of the cagA gene (lanes7 and 10), vacA s1 (lanes 6, 9 and 12) ,vacA s2 (lane 3) ,vacA m1 (lane 5 and 11) ,vacA m2 alleles (lane 2 and 8) respectively. Lane 1 shows 100 bp molecular weight marker (Fermentas)	40
(8)	2% agarose gel electrophoresis showing 271 bp PCR products of the BabA2 gene (lanes 1,2,3 and 4). Lane M shows 100 bp molecular weight marker (Fermentas)	41

LIST OF ABBREVIATION

ALT	: Alanine transaminase
AST	: Aspartate trnsaminase
BabA gene	: Blood group antigen-binding adhesin gene
CagA gene	: Cytotoxin associated gene A
CBC	: Complete blood count
DAG	: Diffuse antraal gastritis
DNA	: deoxyribonucleic acid
DRA	: Deoxy ribonucleic acid
EDTA	: Ethylenediaminetetraacetic acid
ELISA	: Enzym linked immunosirbant assay
GERD	: Gastro- esophageal reflux
GIT	: Gastrointestinal tract
H&E	: Haematoxylin& eosin
<i>H. pylori</i>	: Helicobacter pylori
HB	: Haemoglobin
HPSA	: Helicobacter Pylori stool antigen detection test
IDA	: Iron deficiency anemia
IL	: Interleukin
INR	: International normalized ratio
MAG	: Multifocal atrophic gastritis
MALT	: Mucosa associated lymphoid tissue
OMP	: Outer membrane protein
PAI	: Pathogenicity island
PCR	: Polymerase chain reaction
PPIs	: Proton pump inhibitor
RAP	: Recurrent abdominal pain
RUT	: Rapid urease test
U/V	: Ultra violet
Vac A gene	: Vacuolating cytotoxin gene A