Results

RESULTS

1- Control group

i. complete blood picture

- Haemoglobin concentration : ranged between 10-145mg% with a mean of 12.7±0.3 mg%.
- RBCs counts ranged between 3.9-5.3 million/cmm with a mean of 4.7±0.1 million/cmm.
- WBCs count : ranged between 3900-9000/cmm with a mean of 6105±393.3/cmm.
- Platelet count : ranged between 170-372x10^3/cmm with a mean of 255±16.8x10^3/cmm.

ii. Coagulation study :

- Prothrombin activity ranged between 73-111% with a mean of 89.9±3.3%.
- Activated partial thromboplastin time ranged between 30-40.8 seconds with a mean of 34.1±.9 seconds.
- Fibrinogen concentration ranged between 230-498mg% with a mean of 345.1±22.3mg%.
- Activated protein C resistance : none of the control group were APC resistance positive.

iii. **Serum lipids :**

- Cholesterol concentration ranged between 152-283mg% with a mean of 190.4±9.9 mg%.
- Triglyceride concentration : ranged between 61-142mg% with a mean of 101.5 ±6.8mg%.
- HDL concentration ranged between 32-55mg% with a mean of 41.6±1.7mg%.
- LDL concentration ranged between 69-211mg% with a mean of 115.5±10.4mg%

iv. **CRP seropositivity** :33.3% are seropositive to CRP while 66.7% are seronegative

v. **H. pylori seropositivity** :66.7% are seropositive to H. pylori while 33.3% are seronegative.

2-Coronary heart disease (CHD) group :

i. **Complete blood picture :**

- haemoglobin concentration ranged between 10.5-15mg% with a mean of 12.2±0.5mg%.
- RBCs count ranged between 3.3-5.4 million/cmm with a mean of 4.4±0.1million/cmm.
- WBCs count ranged between 4200-12.800/cmm with a mean of 7836.3±403.6/cmm.
- Platelets count ranged between 133-460x10^3/cmm with a mean of

271.7±18.1x10^3/cmm.

ii. **Coagulation study :**

- Prothrombin activity : ranged between 74-116% with a mean of 92.8±2.2%.
- Activated partial thromboplastin time : ranged between 29.5-41.5 seconds with a mean of 35.4±0.6 seconds.
- Fibrinogen concentration ranged between 204-748mg% with a mean of 411.8±22.6mg%.
- (APC) resistance : 26.7% are positive .

iii. **Serum lipids :**

- Cholesterol concentration ranged between 142-386mg% with a mean of 224.7±10.2mg%.
- Triglyceride concentration ranged between 56-302mg% with a mean of 127.3±10.1mg%.
- High density lipoprotein (HDL) concentration : ranged between 21-166mg% with a mean of 49±5.5mg%.
- Low density lipoprotein (LDL) concentration : ranged between 85.6-328 with a mean of 157.2±10.7mg%.

iv. **C-reactive protein seropositivity** : 53.3% are seropositive while 46.7% are seronegative.

v. **H. pylori seropositivity** : 83.3% are seropositive while 16.7% are seronegative.

3-Comparison between CHD group and normal controls :

i. Risk factors :(table 1)

- Diabetes mellitus : showed a statistically non-significant high prevalence in CHD group (63.3%) as compared to control group (33.3%), p>0.05.
- Hypertension : showed a statistically non-significant higher prevalence in CHD group (66.7%) as compared to control group (40%), p>0.05.
- Smoking habits : expressed a non- significant higher prevalence in CHD group (36.7%) as compared to control group (20%), p>0.05.
- H. pylori seropositivity : showed a statistically non-significant higher prevalence in CHD group (83.3%) as compared to (66.7%) of normal control, p>0.05.

ii. Complete blood picture : (table 2)

- Hemoglobin concentration : showed a non-significant lower level in CHD group (12.2±0.5mg%) as compared to (12.7±0.3mg%) control group, P>0.05.
- RBCs count : expressed a non-significant lower count in CHD group (4.4±0.1 million/cmm) as compared to control group (4.7±0.1 million/cmm), P>0.05.
- WBCs count : showed a significant higher count in CHD group

(7836±403/cmm) as compared to control group (6105±393/cmm) ($p<0.05$).

- Platelet count : expressed a non-significant higher count in CHD group ($217.7\pm18.1 \times 10^3$/cmm) as compared to normal control ($255.1\pm16.8 \times 10^3$/cmm), $p>0.05$.

iii. Coagulation study : (table 3)

- Prothrombin activity showed a non-significant higher level in CHD group (92.8±2.2%) as compared to control group (89.9±3.3%), $p>0.05$.
- Activated partial thromboplastin time showed a non-significant longer time in CHD group (35.4±0.6 sec) as compared to normal control (34.1±0.9), $p>0.05$.
- Fibrinogen concentration : showed a non-significant higher level in CHD group (411.8±22.6mg%) as compared to normal control group (345.1±22.3mg%), $p>0.05$.
- APC resistance positivity expressed a highly significant higher prevalence in CHD group (26.7%) as compared with the control group (0%), $p<0.01$.

iv. Serum lipids and CRP : (table 4)

- Cholesterol concentration showed a significantly higher level in CHD group (224.7±10.2mg%) as compared to control group

(190.4±9.9), p<0.05.

- Triglyceride concentration expressed a significantly higher level in CHD group (127.1±10.1mg%) as compared to control group (101.5±6.8mg%), p<0.05.
- HDL : showed a non-significantly higher level in CHD group (49.0±5.5mg%) as compared to control group (41.6±1.7mg%), p>0.05.
- LDL : expressed a significantly higher level in CHD group (157.3±10.7mg%) as compared to normal control (115.5±10.4mg%), p<0.05.
- CRP seropositivity showed a non significant higher prevalence in CHD group (53.3%) as compared to normal control (33.3%), p>0.05.

4-Prevalence of H. pylori infection in the study group : (table 5)

It was 77.8%

5-Comparison between H. pylori seropositive and H. pylori seronegative in CHD group:

i. Risk factors:(table6)

- Diabetes : showed statistically non-significant higher prevalence in HP+ve group (64%) more than HP -ve group (60%), p>0.05.
- Hypertension : expressed a non significant higher prevalence in

HP +ve group (64%) more than HP -ve group (60%), p>0.05

- Smoking habits : showed a non-significant lower prevalence in HP+ve group (36%) more than HP -ve group (40%), p>0.05.

ii. Complete blood picture : table (7)

- Haemoglobin concentration : showed a non-significant low level in HP +ve group (12.1±0.5mg%) as compared to HP -ve group (12.9±0.4mg%), p>0.05.
- RBCs count : expressed a highly significant lower count in HP +ve group (4.3±0.1 million/cmm) than in HP-ve group (4.9±0.1), p<0.01.
- WBCs count : showed a non significant higher count in Hp+ve group (8013±402.8/cmm) than in HP-ve group (6950±1408.4/cmm), p>0.05).
- Platelet count showed a significantly high count in HP +ve group (288±18.9x10^3/cmm) as compared to HP-ve (190±38.7x10^3/cmm), p<0.05.

iii. Coagulation study : table (8)

- Prothrombin activity expressed a non significant higher activity in HP+ve group (92.9±2.3%) than HP -ve group (91.4±7.0), p>0.05.

- Activated partial thromboplastin time expressed a non significant short time in HP +ve group (35.3±.7 second) as compared to HP -ve group (36.2±1.5 second).
- Fibrinogen concentration showed a significantly higher concentration in HP +ve (427.2±12.5mg%) more than in HP -ve group (334.6±39.3mg%), $p<0.05$
- APC resistance : showed a non-significant higher prevalence in HP +ve group (32%) than in HP -ve group (0%), $p>0.05$.

iv. Serum lipids and CRP :(table 9)

- Cholesterol level showed a non-significant high level in HP+ve group (227.1±12mg%) as compared to HP-ve group (212.6±13.3mg%), $p>0.05$.
- Triglyceride level showed a non significant high level in HP+ve group (132.4±11.3mg%) as compared to HP-ve group (100.6±20.1mg%), $p>0.05$.
- HDL level expressed a non significant low level in HP +ve group (48.8±6.3mg%) as compared to HP -ve group (50.0±11.2mg%), $p>0.05$
- LDL concentration showed a non significant higher level in HP +ve group (160.1±12.1mg%) than (142.6±23.3mg%) of HP -ve group.
- CRP seropositivity showed a significantly higher prevelance in

HP +ve group (64%) than in HP -ve group (0%), $p<0.05$.

6-Comparison between H.pylori seronegative and H.pylori serppositive in control group :

i. Risk factors : (table10)

- Diabetes mellitus : showed a non significant high prevalence in HP +ve (50%) than HP -ve (0%) group, $p>0.05$.
- Hypertension : showed a non-significant high prevalence in HP+ve (50%) as compared to HP-ve group (20%), $p>0.05$.
- Smoking : expressed an equal prevalence in both HP+ve and HP-ve groups ,each is (20%).

ii. Complete blood picture (table11)

- Haemoglobin concentration : showed a higher concentration of HP+ve group (13.1 ± 0.3mg%) than HP-ve group (12.1 ± 0.9mg%) which is non-significant.
- RBCs count showed a non-significant higher count in HP+ve group (4.8 ± 0.1million/cmm) than HP-ve (4.3 ± 0.3million /cmm)
- WBCs count : expressed a non significant high count in HP+ve (6700 ± 129.4/cmm) as compared to HP-ve (6026 ± 1844.9/cmm)
- Platelet count : showed a non-significant high count in HP+ve group ($289.3\pm23.9x10^3$/cmm) as compared to HP-ve group ($239.3\pm20.9x10^3$/cmm), $p>0.05$.

iii. Coagulation study :(table12)

- Prothrombin activity : showed a non-significant lower activity in HP+ve (89.8±4.8%) as compared to HP-ve group (94.6±2.9%), $p>0.05$.
- APTT : expressed a non-significant longer time in HP +ve (34.3±1.0sec.) than HP-ve (33.7±1.9 sec.), $p>0.05$.
- Fibrinogen : showed a non-significantly high level in HP+ve group (353.2±59.6mg%) as compared to HP-ve group (341.2±19.8mg%).

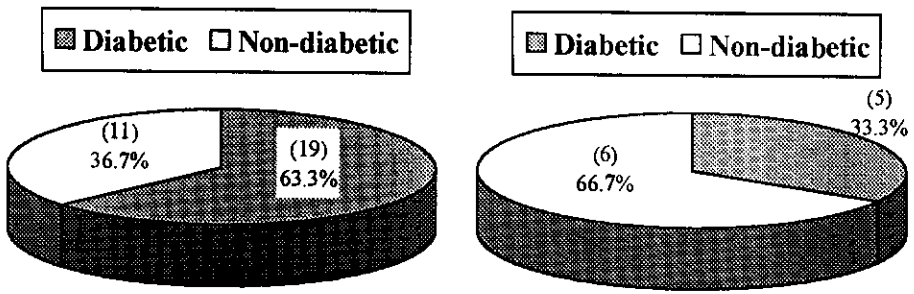
iv. Serum lipids and CRP:(table13)

- Cholesterol concentration showed a significantly higher level of cholesterol in HP+ve (206.3±12.1mg%) than HP-ve (158.6±2.7mg%), $p<0.05$.
- Triglyceride concentration expressed a non-significant high level in HP +ve group (106±8.3mg%) as compared HP -ve group (92.2±12.3mg%), $p>0.05$.
- HDL concentration showed a non-significant low level in HP+ve group (40.8±1.1mg%) as compared to HP-ve (43.2±4.9mg%).
- LDL concentration showed a non-significant low level in HP+ve group (114.9±10.8mg%) as compared to HP -ve group (116.6±24.8mg%).
- CRP seropositivity showed a non-significant high prevalence in

HP+ve group (40%) as compared to HP-ve group (20%).

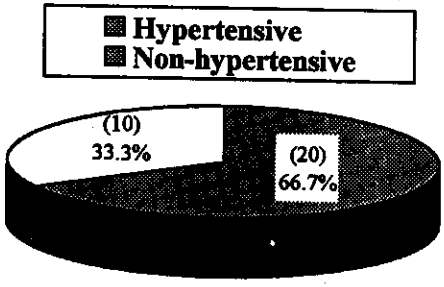
Table (1) :

	Coronary heart disease N=30	Control N=15	Significance
Age	60.8±1.4	55.9±2.4	>0.05
Sex Male	17 (56.7%)	7 (46.7%)	>0.05
Female	13 (43.3%)	8 (53.3%)	
CPK	163.6±12.9	85.7±11.9	<0.01
LDH	215.0±17.1	269.5±23.3	>0.05
Diabetes	19 (63.3%)	5 (33.3%)	>0.05
Hypertension	20 (66.7%)	6 (40.0%)	>0.05
Smoking	11 (36.7%)	3 (20%)	>0.05
HP+ve	25 (83.3%)	10 (66.7%)	>0.05

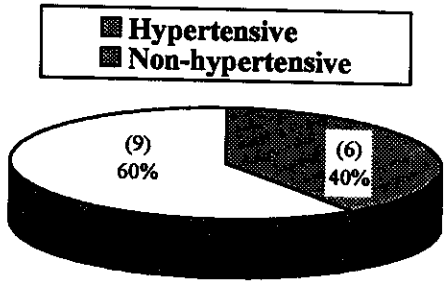


Coronary Heart disease Control

Figure (1) : Diabetes

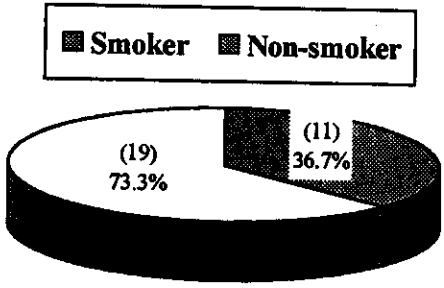


Coronary Heart disease

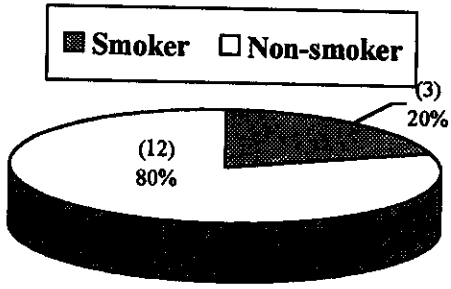


Control

Figure (2) : Hypertension

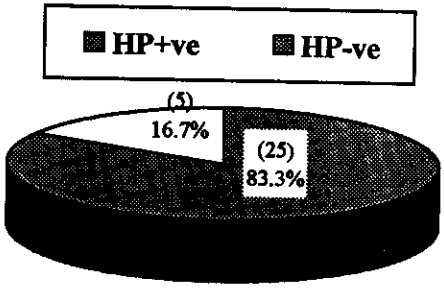


Coronary Heart disease

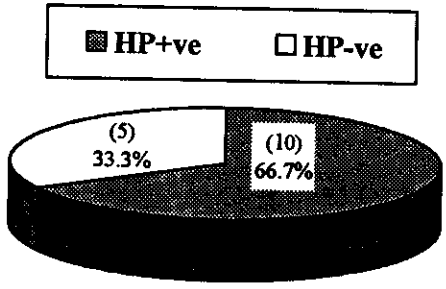


Control

Figure (3) : Smoking



Coronary Heart disease

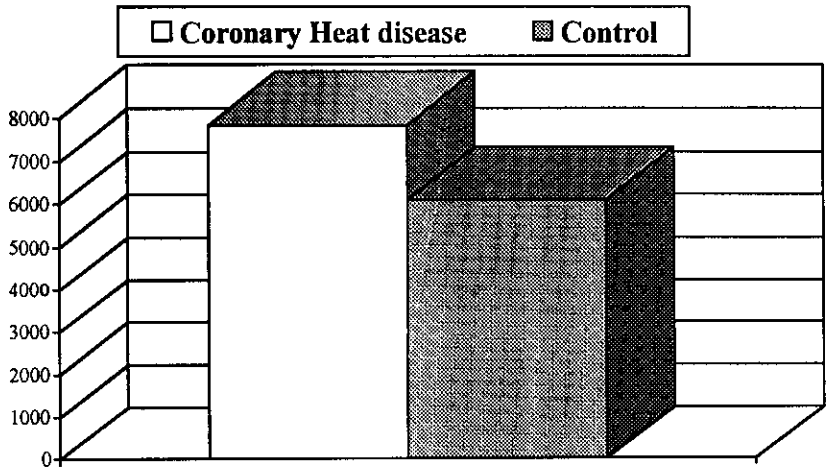


Control

Figure (4) : HP+ve

Table (2) : Complete blood picture

	Coronary heart disease N=30	Control N=15	Significance
Hb%	12.2±0.5	12.7±0.3	>0.05
RBCs	4.4±0.1	4.7±0.1	>0.05
WBCs	7836.3±403.6	6105±393.3	<0.05
Platelets	271.7±18.1	255.1±16.8	>0.05

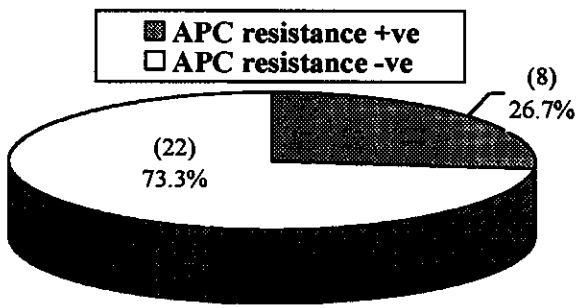


P<0.05 (Significant)

Figure (5) : WBCs

Table (3) : Coagulation study

	Coronary heart disease N=30	Control n=15	Significance
Prothrombin activity	92.8±2.2	89.9±3.3	>0.05
APTT	35.4±0.6	34.1±0.9	>0.05
Fibrinogen	411.8±22.6	345.1±22.3	>0.05
APC resistance	8 (26.7%)	0	<0.01



Coronary Heart disease

Figure (6) : APC resistance

Table (4) : Lipid profile & CRP

	Coronary heart disease N=30	Control N=15	Significance
Cholesterol	224.7±10.2	190.4±9.9	<0.05
Triglycerides	127.1±10.1	101.5±6.8	<0.05
HDL	49.0±5.5	41.6±1.7	>0.05
LDL	157.3±10.7	115.5±10.4	<0.05
CRP +ve	16 (53.3%)	5 (33.3)	>0.05

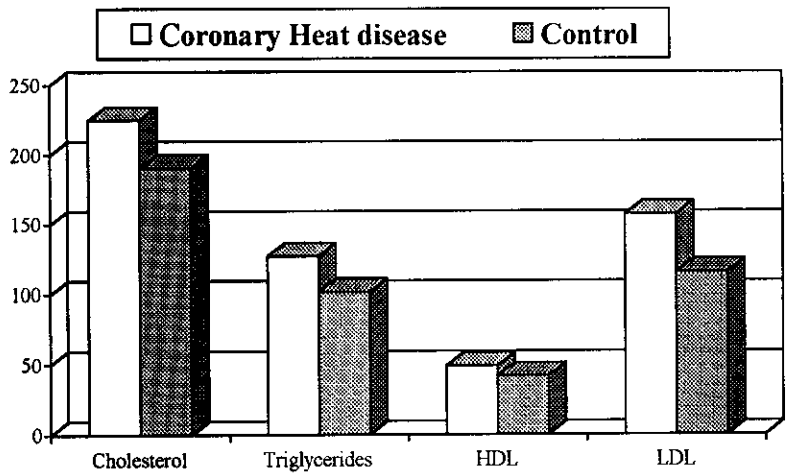
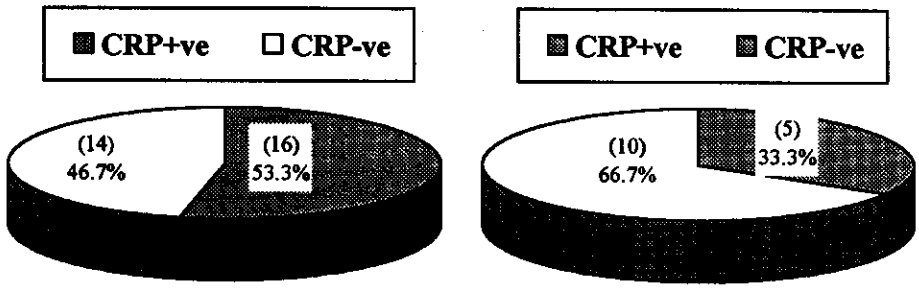


Figure (7) : Lipid profile



Coronary Heart disease Control

Figure (8) : CRP +ve

Table (5) : Prevalence of H. pylori infection in the community.

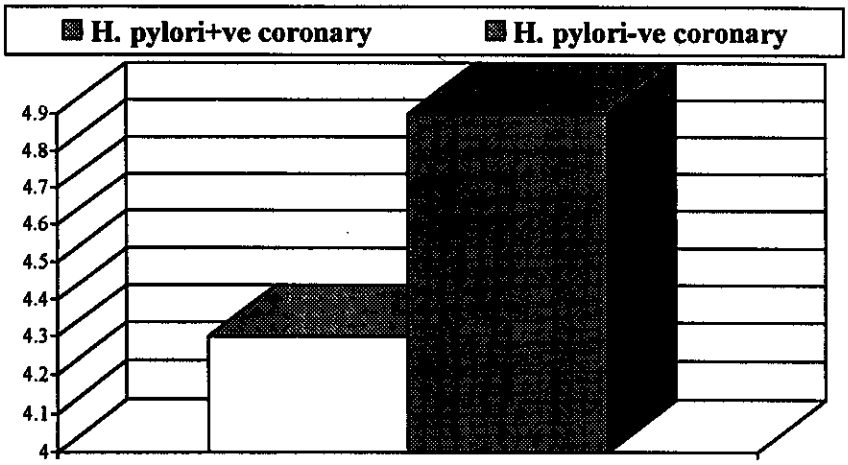
	Coronary heart disease N=30		Control N=15		Total	
	No	%	No	%	No	%
+ve	25	83.3	10	66.7	35	77.8
-ve	5	16.7	5	33.3	10	22.2

Table (6) : H. pylori +ve Vs. H. pylori -ve in coronary heart disease

	H. pylori +ve Coronary N=25	H. pylori -ve coronary n=5	Significance
Age	61.4±1.6	58.2±2.9	>0.05
Sex Male	14 (56.0%)	3 (60%)	>0.05
Female	11 (44.0%)	2 (40%)	
CPK	153.0±11.9	216.4±46.3	>0.05
LDH	210.7±18.0	236.4±53.6	>0.05
Diabetes	16 (64.0%)	3 (60%)	>0.05
Hypertension	16 (64.0%)	3 (60%)	>0.05
Smoking	9 (36.0%)	2 (40%)	>0.05

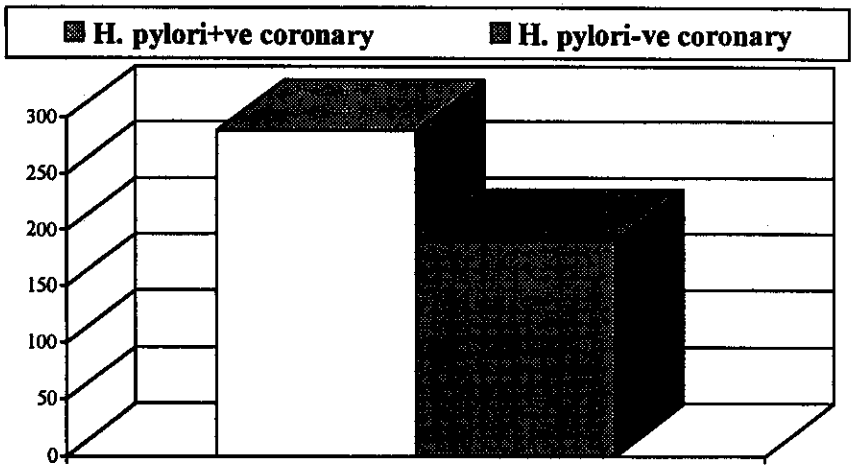
Table (7) : Complete blood picture

	H. pylori +ve Coronary N=25	H. pylori -ve coronary N=5	Significance
Hb%	12.1±0.5	12.9±0.4	>0.05
RBCs	4.3±0.1	4.9±0.1	<0.01
WBCs	8013.6±402.8	6950.0±1408.4	>0.05
Platelets	288.0±18.9	190.0±38.7	<0.05



P<0.01 (Highly significant)

Figure (9) : RBCs

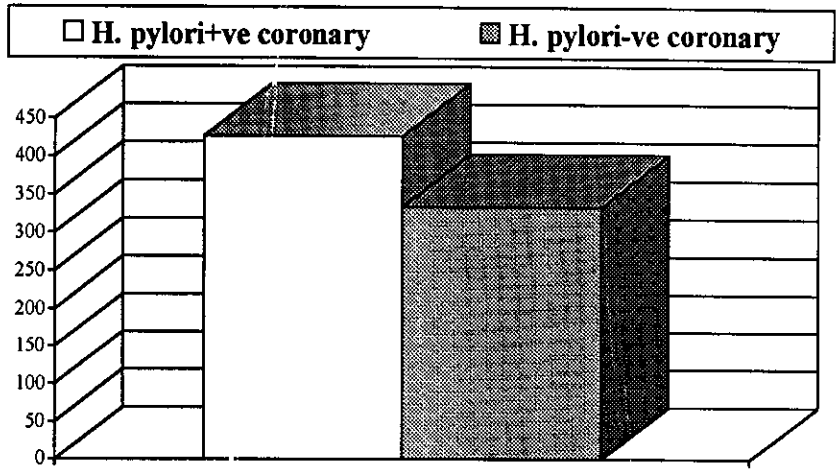


P<0.05 (Significant)

Figure (10) : Platelets

Table (8) : Coagulation study

	H. pylori +ve Coronary N=25	H. pylori -ve coronary n=5	Significance
Prothrombin activity	92.9±2.3	91.4±7.0	>0.05
APTT	35.3±0.7	36.2±1.5	>0.05
Fibrinogen	427.2±12.5	334.6±39.3	<0.05
APC resistance	8 (32.0)	0	>0.05

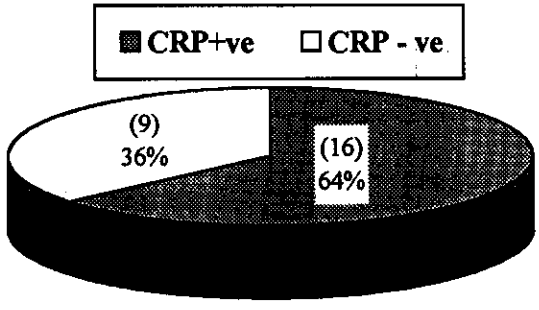


P<0.05 (Significant)

Figure (11) : Fibrinogen

Table (9) : Lipid profile & CRP

	H. pylori +ve Coronary N=25	H. pylori -ve coronary N=5	Significance
Cholesterol	227.1±12.0	212.6±13.3	>0.05
Triglycerides	132.4±11.3	100.6±20.1	>0.05
HDL	48.8±6.3	50.0±11.2	>0.05
LDL	160.1±12.1	142.6±23.3	>0.05
CRP +ve	16 (64.0%)	0	<0.05



H. pylori +ve coronary heart disease

Figure (12) : CRP +ve

Table (10) : H. pylori +ve Vs. H. pylori -ve in control group.

	H. pylori +ve Control N=10	H. pylori -ve control N=5	Significance
Age	55.7±3.0	56.2±4.2	>0.05
Sex Male	4 (40.0%)	3 (60%)	>0.05
Female	6 (60.0%)	2 (40%)	
CPK	81.6±15.9	93.8±17.7	>0.05
LDH	301.1±21.0	204.4±47.4	>0.05
Diabetes	5 (50%)	0	>0.05
Hypertension	5 (50%)	1 (20%)	>0.05
Smoking	2 (20%)	1 (20%)	>0.05

Table (11) : Complete blood picture

	H. pylori +ve Control N=10	H. pylori -ve control N=5	Significance
Hb%	13.1±0.3	12.1±0.9	>0.05
RBCs	4.8±0.1	4.3±0.3	>0.05
WBCs	6700±129.4	6026.0±583.0	>0.05
Platelets	289.2±23.9	239.3±20.9	>0.05

Table (12) : Coagulation study

	H. pylori +ve Control N=10	H. pylori -ve control N=5	Significance
PT	89.8±4.8	94.6±2.9	>0.05
APTT	34.3±1.0	33.7±1.9	>0.05
Fibrinogen	353.2±59.6	341.0±19.8	>0.05
APC	0	0	>0.05

Table (13) : Lipid profile & CRP

	H. pylori +ve Control N=10	H. pylori -ve control N=5	Significance
Cholesterol	206.3±12.1	158.6±2.7	<0.05
Triglycerides	106.1±8.3	92.2±12.3	>0.05
HDL	40.8±1.1	43.2±4.9	>0.05
LDL	114.9±10.8	116.6±24.8	>0.05
CRP +ve	4 (40%)	1 (20%)	>0.05