Results

The study included 30 patients their ages ranged between 20 to 50 years (18 males and 12 females) they suffering form chronic sinusitits which diagnosed clinically and radiologicaly.

Table (1): Means ($\overline{X}$) ± standard deviations of age of the study group.

Variable	**Range**	$\overline{X}$ **± SD**
Age (years)	20-50	31.7 ± 17.3

Table (1) shows that the range of age in the study group was 20-50 years with the mean 31.7 ± 17.3.

Table (2): Sex distribution of the study group.

Sex	No	%	P	Z
Males	18	60.0	< 0.05	2.07
Females	12	40.0		

Table (2) shows sex distribution of the study group. There were 18(60%) males and 12(40%) females patients and this distribution was statistically a significant (p value < 0.5) and this was confirmed by chart.

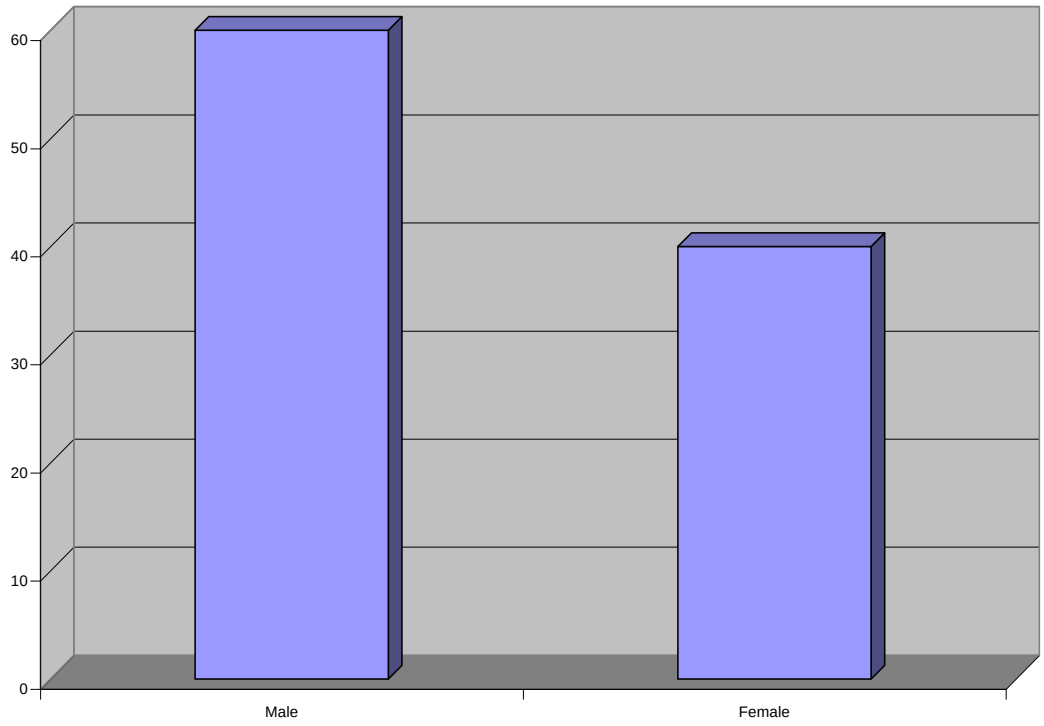


Table (3): Distribution of symptoms among the study group.

Symptoms	No (n = 30)	%
Nasal obst.	30	100.0
Post nasal drip	30	100.0
Headache	27	90.0
Facial pain	19	63.3
Chr. Cough	11	36.6
Voice fatigue	15	50.0
Dry mouth	27	90.0

Table (3) shows distribution of symptoms among the study group. There were 30 patients (100%) complain of Nasal obstruction, 30 patients (100%) complain of post nasal drip, 27 patients (90%) with headache, 19 patients (63.3%) with facial pain, 11 patients (36.6%) complain of chr. Cough, 15 patients (50%) with voice fatigue and there were 27 (90%) complain of dry mouth.

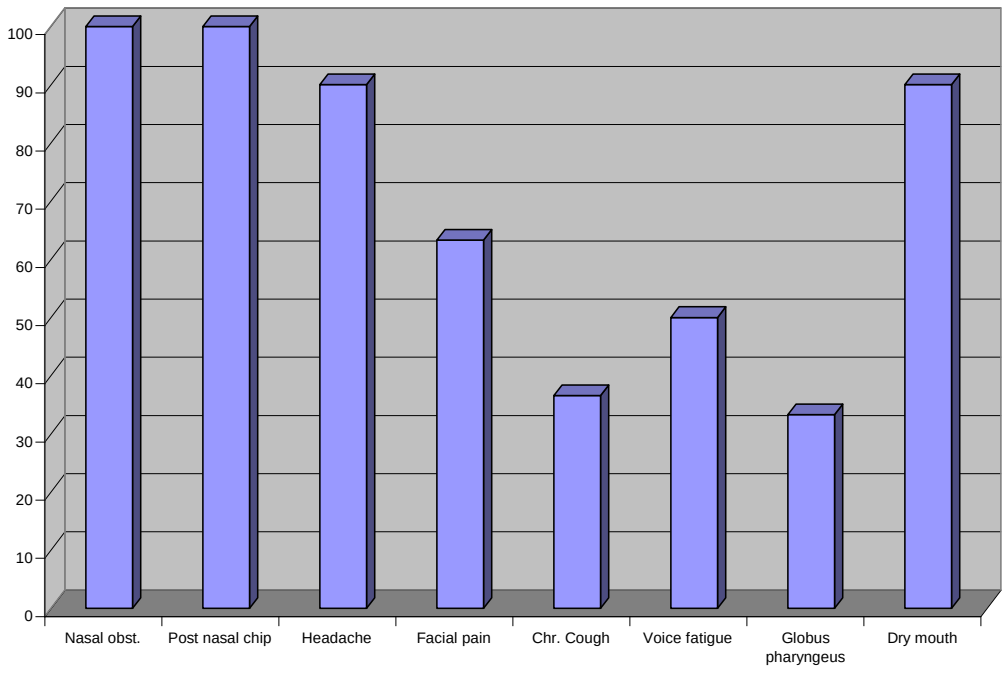


Table (4): Means ± SD of duration of symptoms.

Duration (months) / **Symptoms**	$\overline{X}$ **± SD**
Nasal obst.	7.3 ± 3.1
Post nasal chip	6.8 ± 2.9
Headache	7.3 ± 2.8
Facial pain	5.4 ± 1.9
Chr. Cough	6.3 ± 3.4
Voice fatigue	5.9 ± 2.9
Dry mouth	6.8 ± 2.4

Table (4) shows ± SD of duration of symptoms, the mean duration of symptoms was 7 months with a range of 4-11 months.

Table (5): Distribution of signs among the study group.

Signs	No (n = 30)	%
Discharge (mucopurulnt)	30	100.0
Mucosal edema	19	63.3

Table (5) shows distribution of signs among the study group, there were 30 patients (100%) had mucopurulnt discharge, there were 19 patients (63.3%) had mucosal oedema.

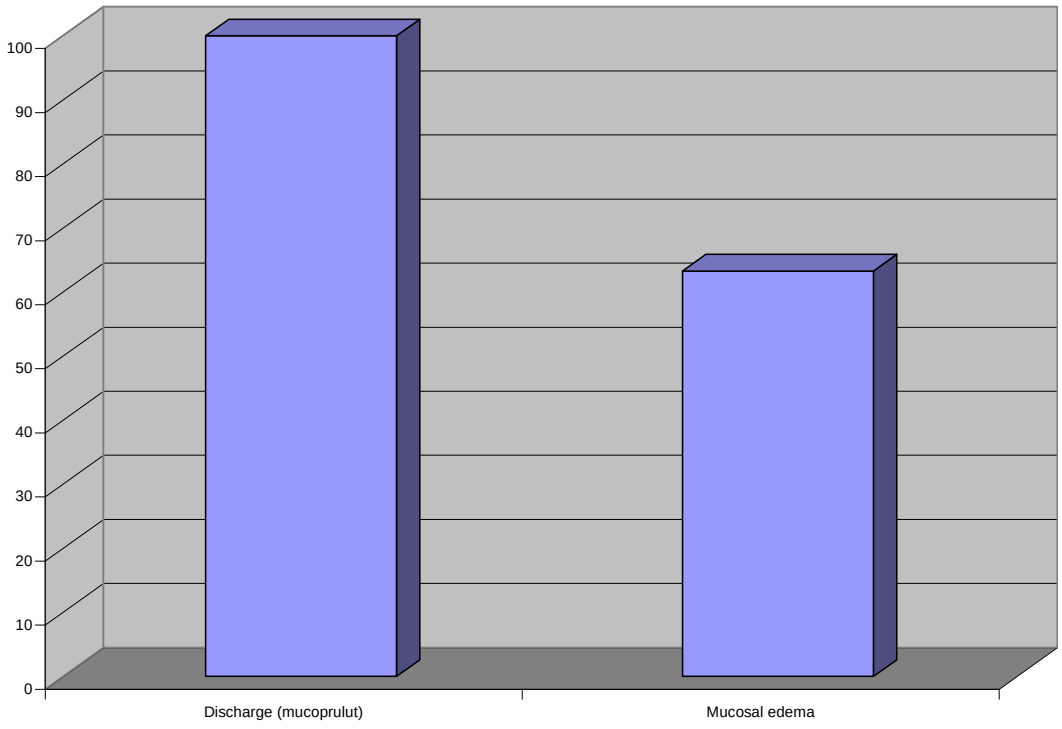


Table (6): Distribution of gastoesoph reflus dis. (GERD) amang study group.

GERD	No (n = 30)	%
Heart burn	5	16.6
Regurgitation	5	16.6
Acid taste	5	16.6

Table (6) shows distribution of GERD. There were 5 patients (16.6%) complain of heart burn, 5 patients (16.6) complain of regurgitation, and 5 patients (16.6%) complain of acid taste.

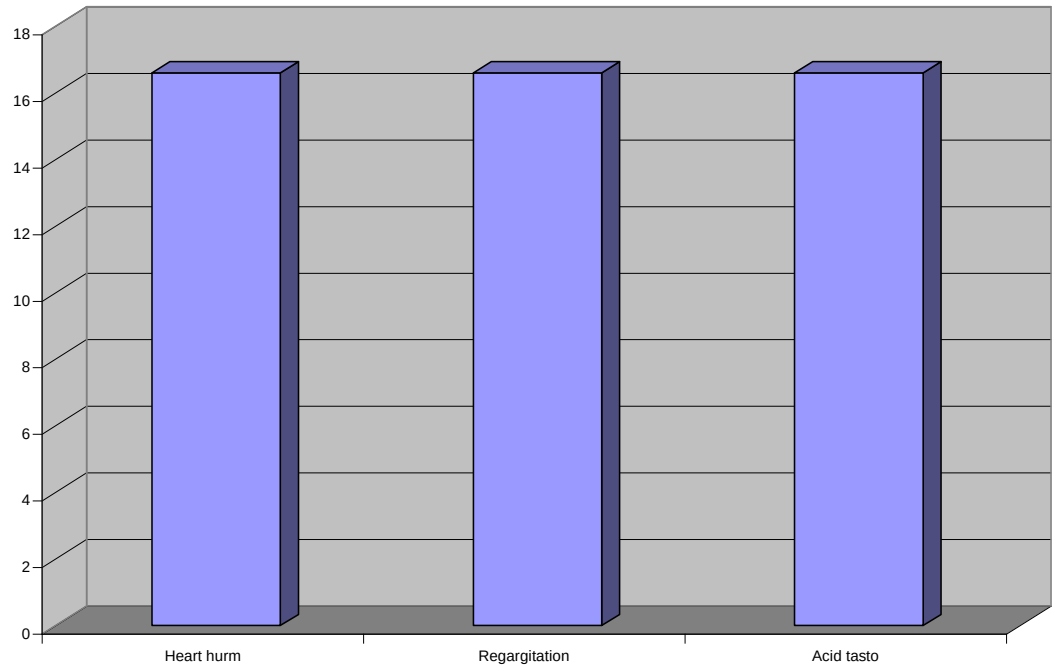


Table (7): CT finding pre operative.

CT finding	No (n = 30)	%
Sinusitis (affecting Anterior sinus group)	25	83.4 16.6
Pansinusitis (all sinus affected)	5	

Table (7) shows distribution of sinus affection regarding pre-operative CT. There were 25 patients (83.4%) with sinusitis affecting antrior sinus group , there were 5 patients (16.6%) with Pansinusitis.

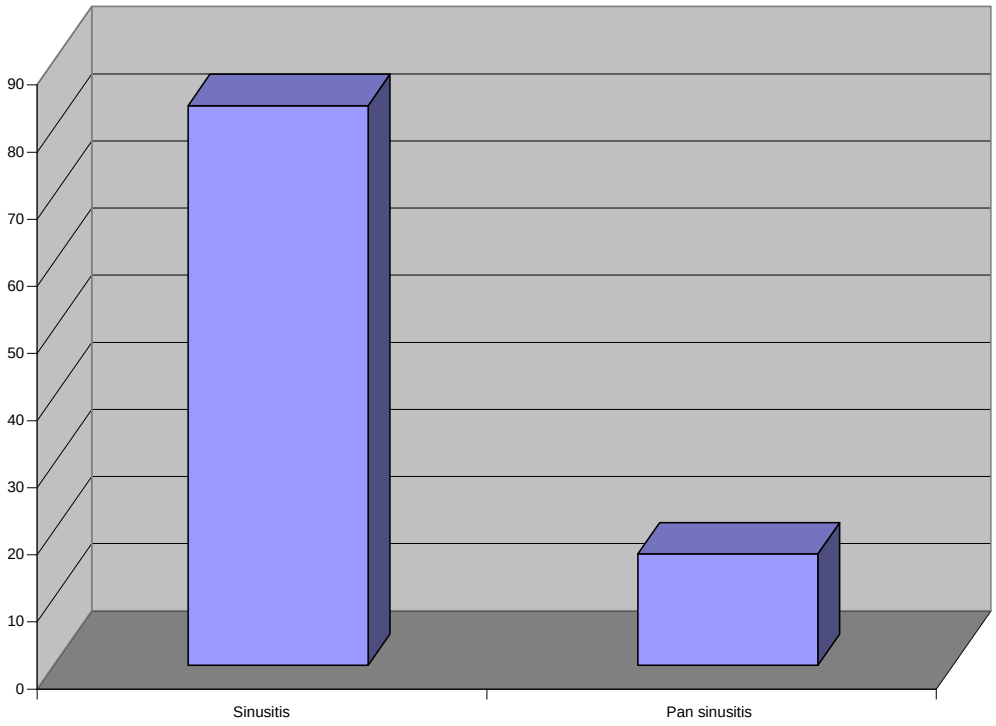


Table (8): Distribution of immunhistochemical examination of the biopsy of sinus mucosa before and after medical regimen (triple antibiotic therapy).

Results of biopsy	Before		After	
	No	%	No	%
H. pylori positive	22	73.3	16	53.3
H. pylori negative	8	26.7	14	46.7

Table (8) shows distribution of study group according to immunohistochemical examination of sinus mucosa biopsy before and after the medical regime.

(before medical regimen)

There were 22 patients (73.3%) had the +ve H. pylori biopsies. There were 8 patients (26.7%) had –ve H. pylori biopsies.

(after medical regimen)

There were 16 patients (53.3%) had +ve H. pylori biopsies. There were 14 patients had –ve H. pylori biopsies (46.7%).

6 cases were improved by medical therapy and biopsies became negative for H. pylori and the remainder cases not improved by medical treatment and biopsies for H. pylori still positive.

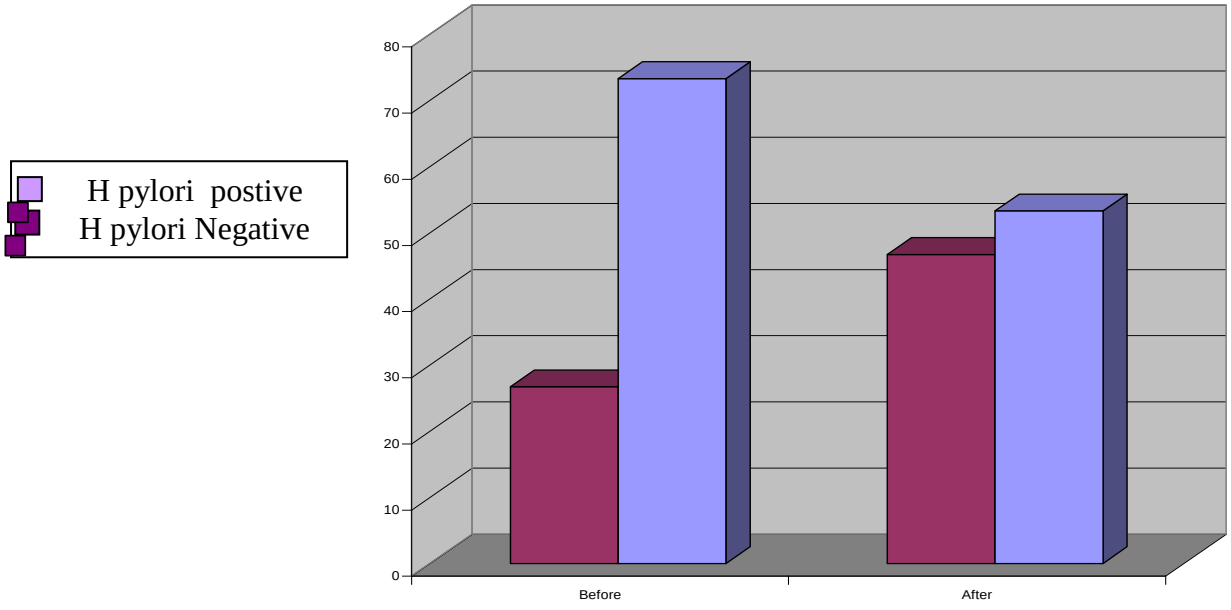


Table (9): Distribution of study group according to H & E staining of OMC biopsyshowing histopathological finding suggesting C R S

H.S examination	No	%	Z	P
Positive	30	100	1.83	<0.05

Table (9) shows distribution of the study group according to H & E staining of the OMC biopsy. There were 30 patients (100%) show chronic rhinosinusitis (+ve biopsies).

All biopsies which were examined show chronic Rhino sinusitis.

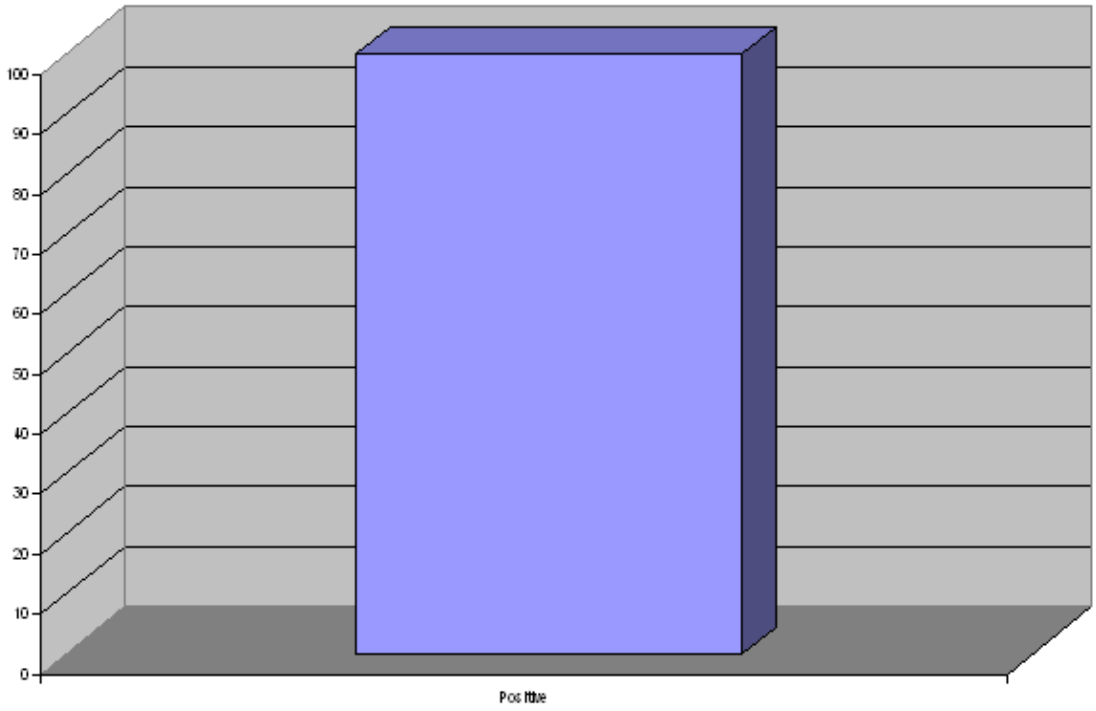
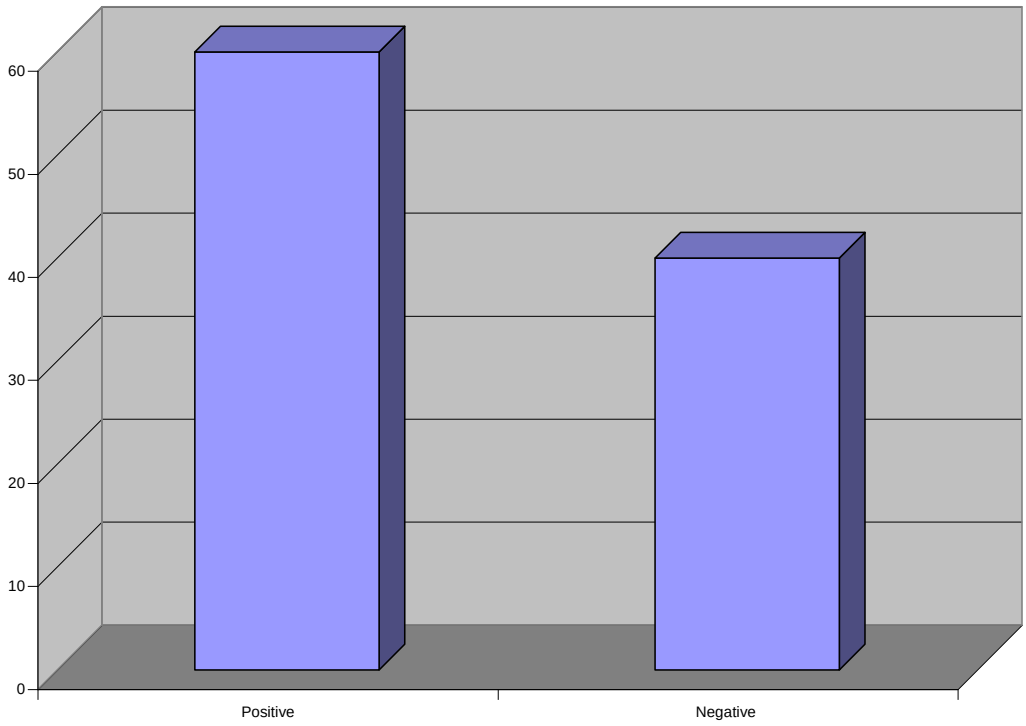
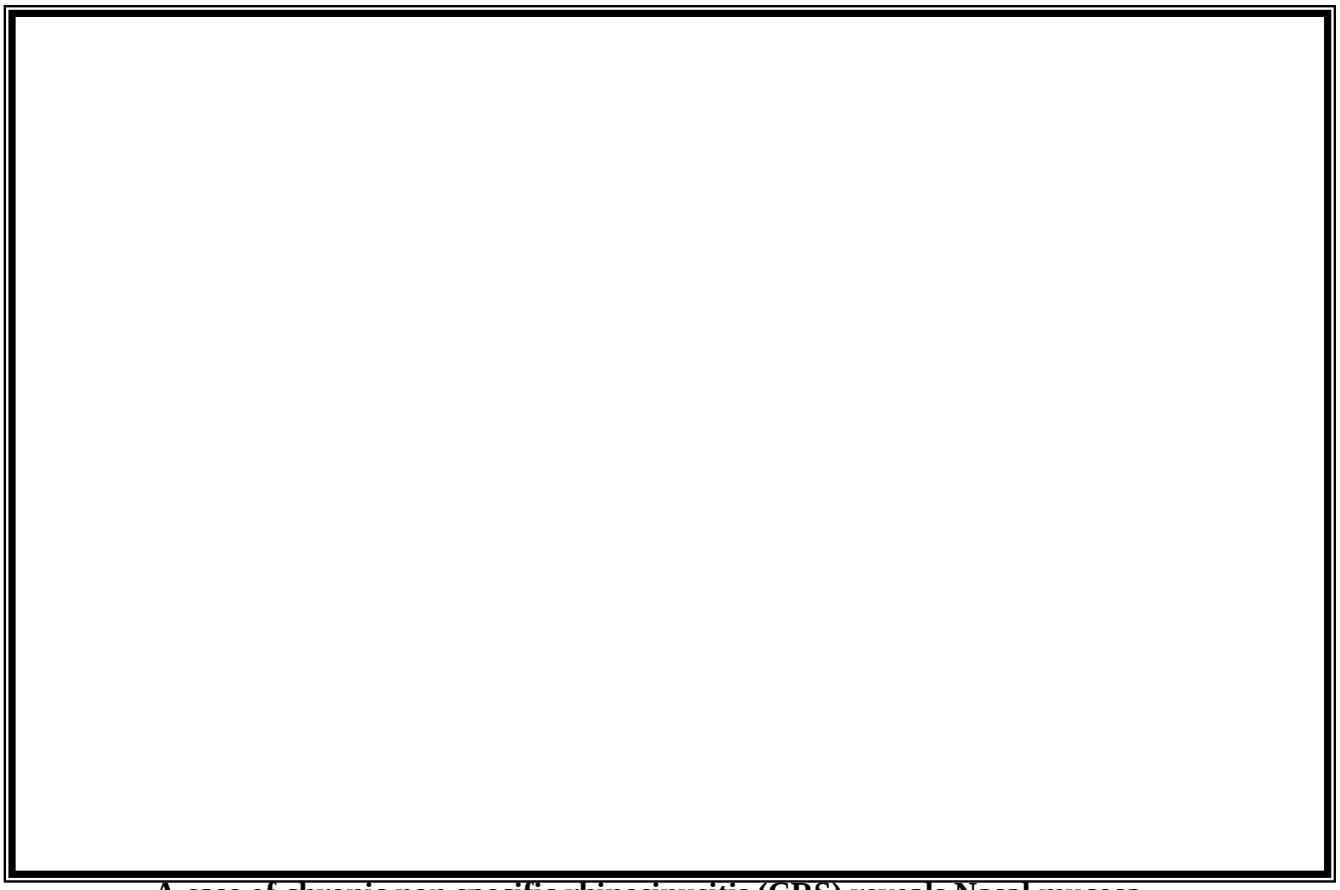


Table (10): Distribution according to giemsa staining.

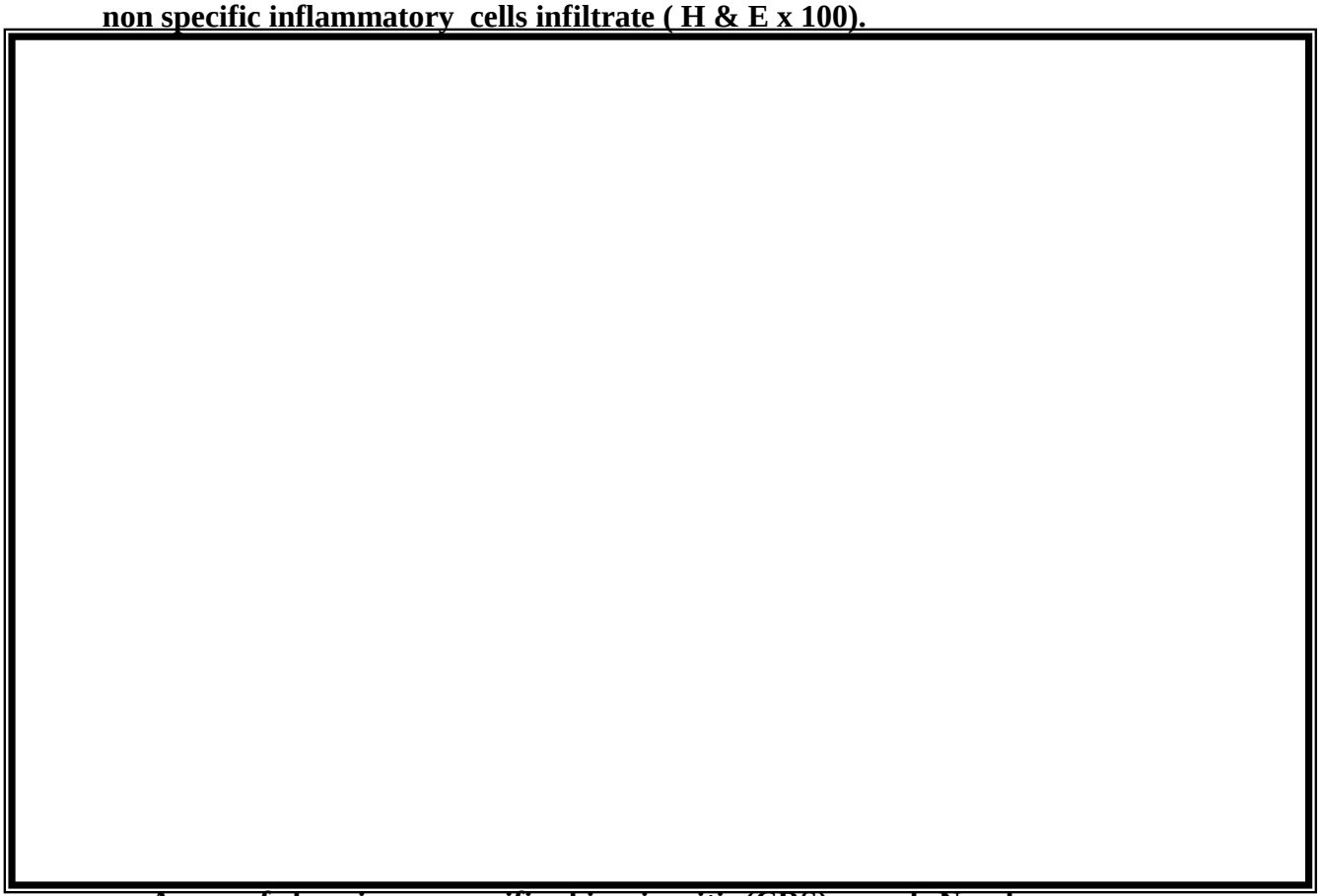
Giemsa staining	No	%	Z	P
Positive	18	60.0	1.1	> 0.05
Negative	12	40.0		

Table (10) shows distribution of the study group according to Giemsa staining. There were 18 patients (60%) show +ve Giemsa staining for H pylori . There were 12 patients (40%) show –ve Giemsa staining. for H pylori

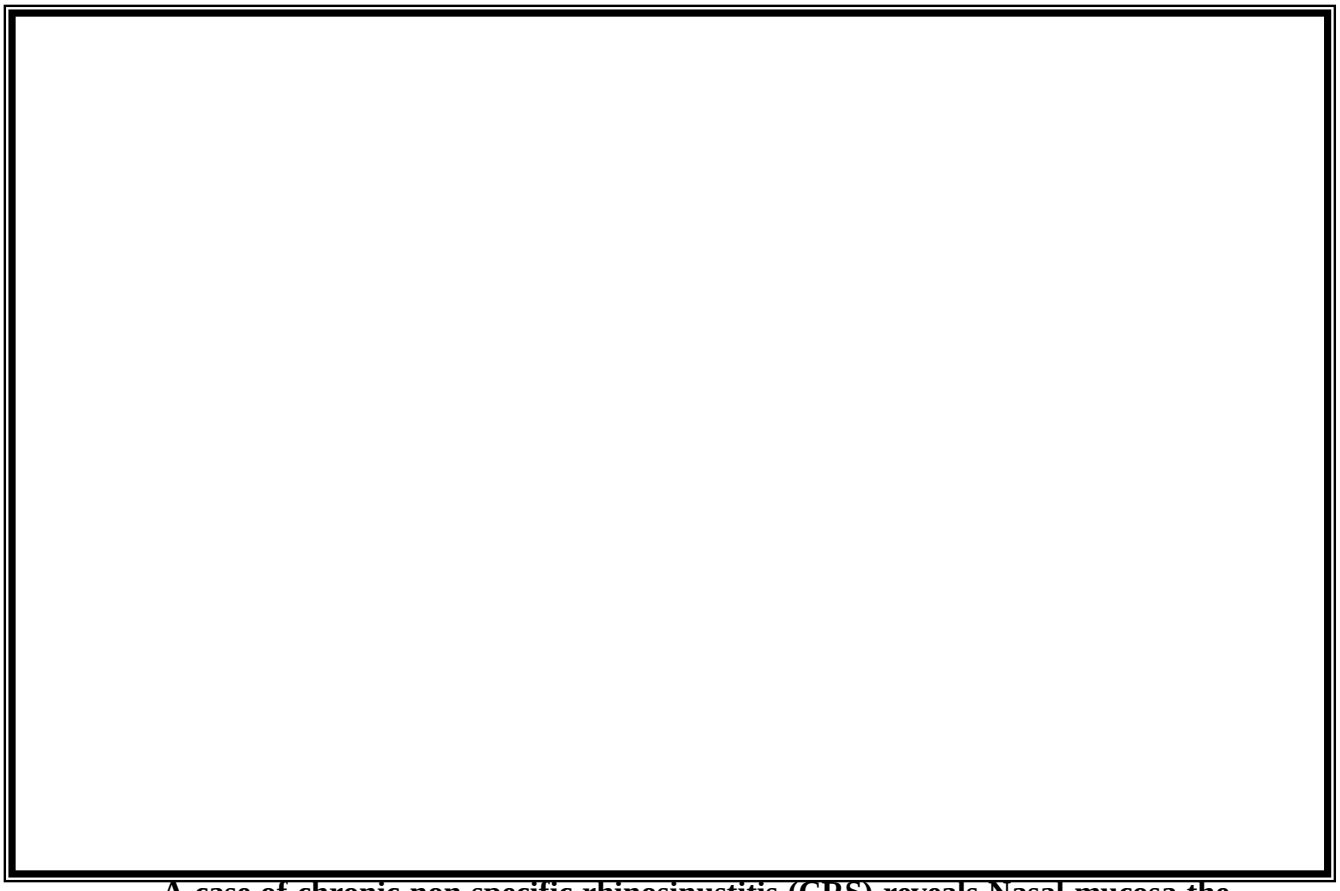




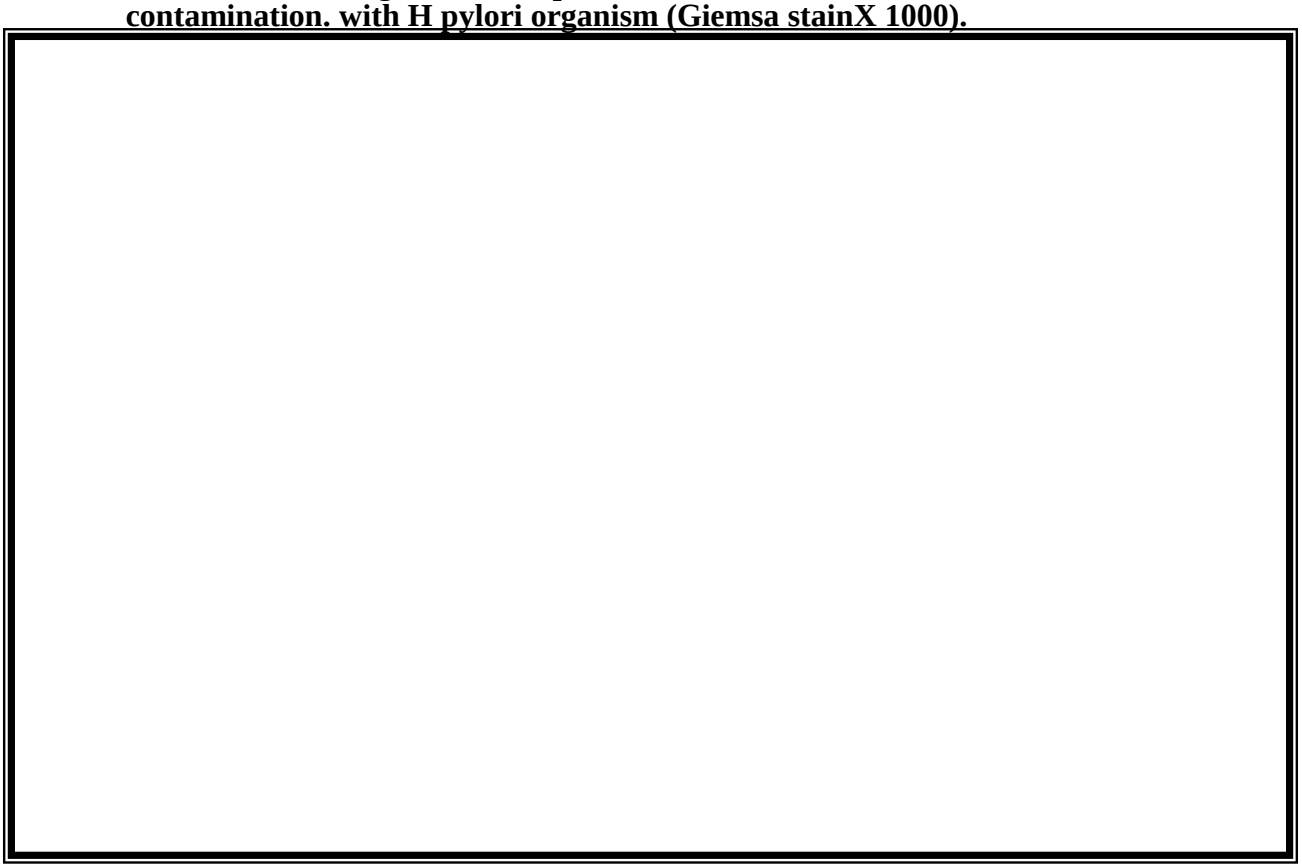
A case of chronic non specific rhinosinusitis (CRS) reveals Nasal mucosa covered by Respiratory transitional epithelium with lamina propria show heavy non specific inflammatory cells infiltrate (H & E x 100).



A case of chronic non specific rhinosinusitis (CRS) reveals Nasal mucosa covered by Respiratory transitional epithelium with lamina propria show heavy non specific inflammatory cells infiltrate (H & E x 200).

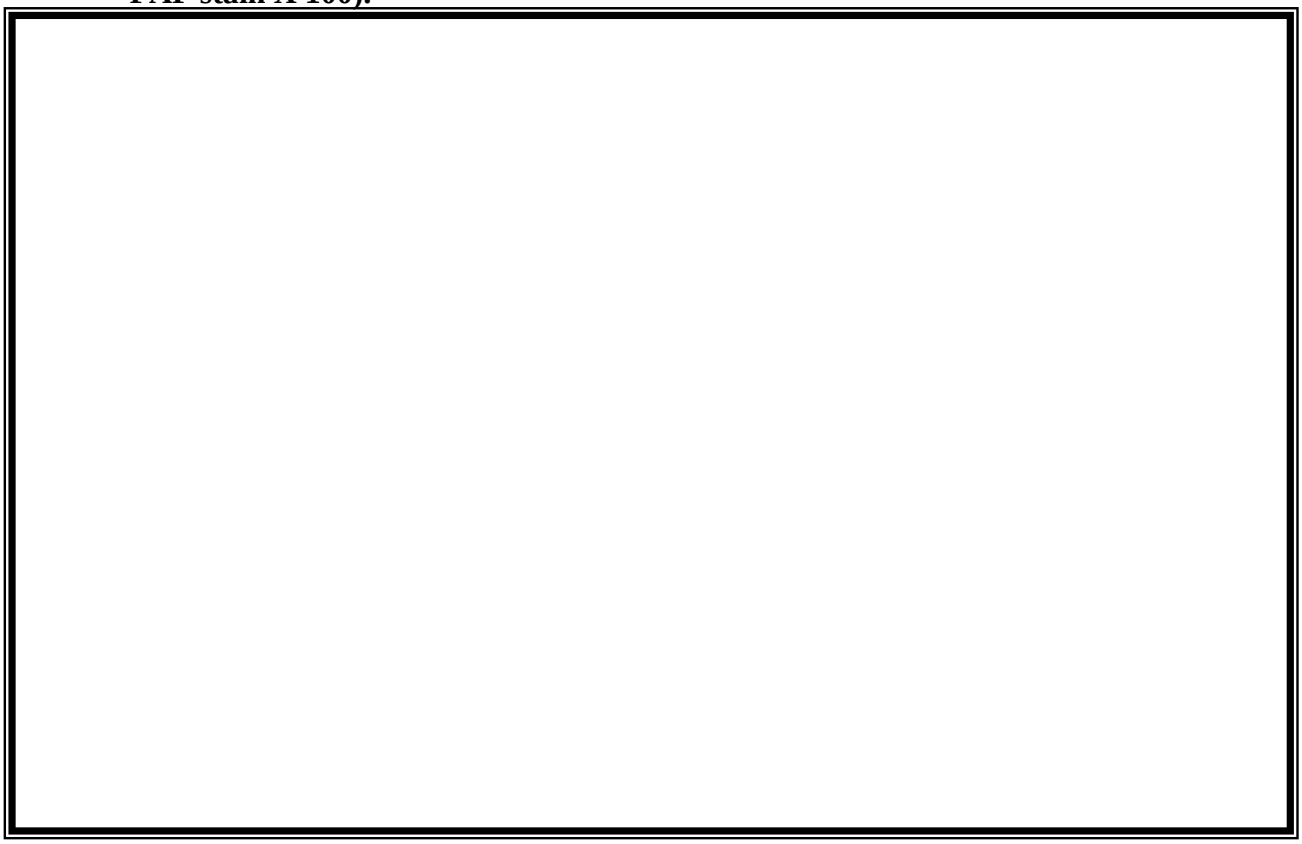


A case of chronic non specific rhinosinustitis (CRS) reveals Nasal mucosa the surface of the glandular epithelium and luminal secretion show mild contamination. with H pylori organism (Giemsa stainX 1000).

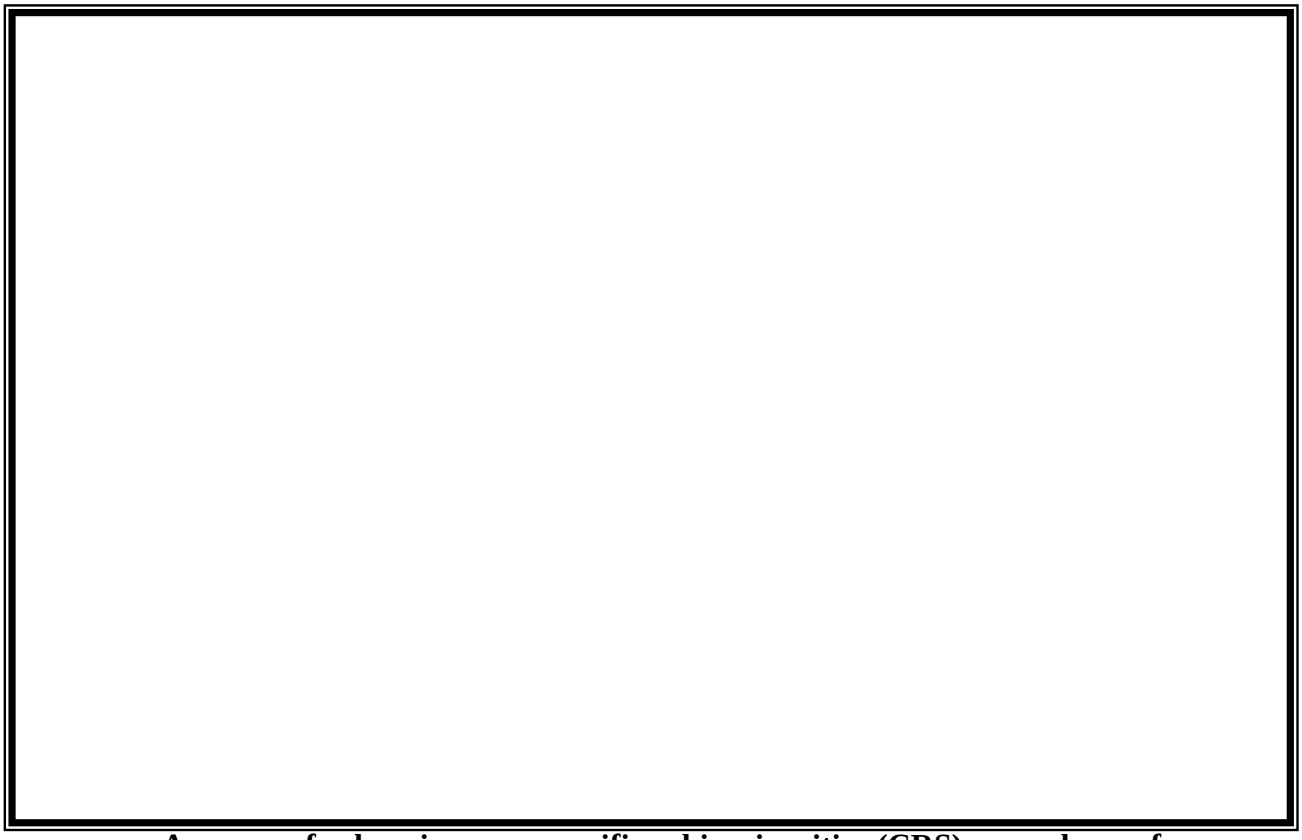


A case of chronic non specific rhinosinustitis (CRS) reveals Nasal mucosa covered by Respiratory transitional epithelium. The surface of glandler epithium and the luminal secretions show heavy contamination with H pylori organism (Giemsa stainX 1000).

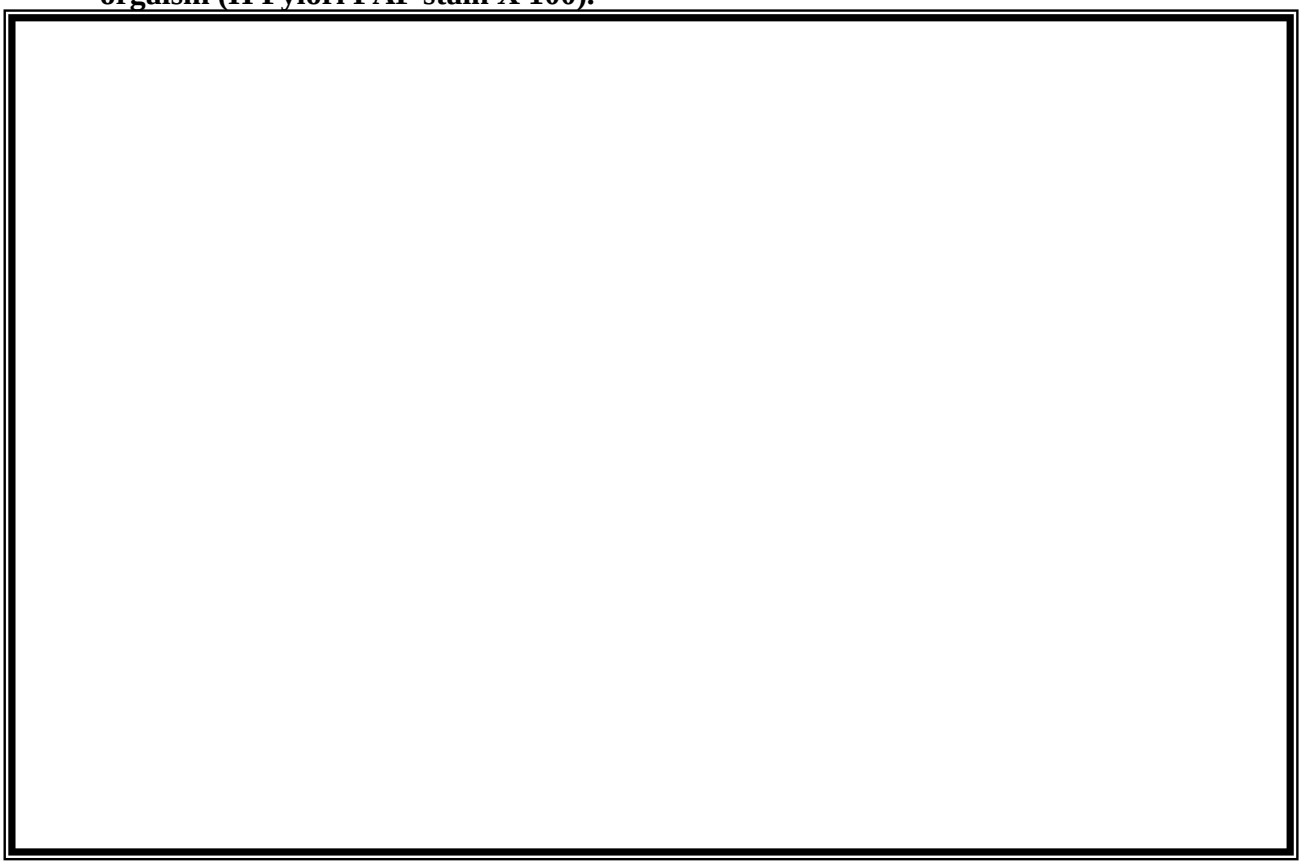
A case of chronic non specific rhinosinusitis (CRS) reveals surface epithelium showing mild brownish immunostaining of surface epithelium and the luminal secretions. This denote mild contamination with H pylori Organism (H Pylori PAP stain X 100).



A case of chronic non specific rhinosinusitis (CRS) reveals nasal gland showing moderate brownish immunostaining of surface epithelium and the luminal secretions. This denote moderate contamination with H pylori Organism (H Pylori PAP stain X 200).



A case of chronic non specific rhinosinusitis (CRS) reveals surface epithelium showing marked brownish immunostaining of glandler epithelium and the luminal secretions. This denote heavy contamination with H pylori orgaism (H Pylori PAP stain X 100).



A case of H pylori associated chronic rhinosinusitis after triple antibiotic therapy show negative immunostaining for H Pylori organism (Hpylori PAP stain X 200).

A case of H pylori associated chronic rhinosinusitis after triple antibiotic therapy show negative immunostaining for H Pylori organism (Hpylori PAP stain X 200).