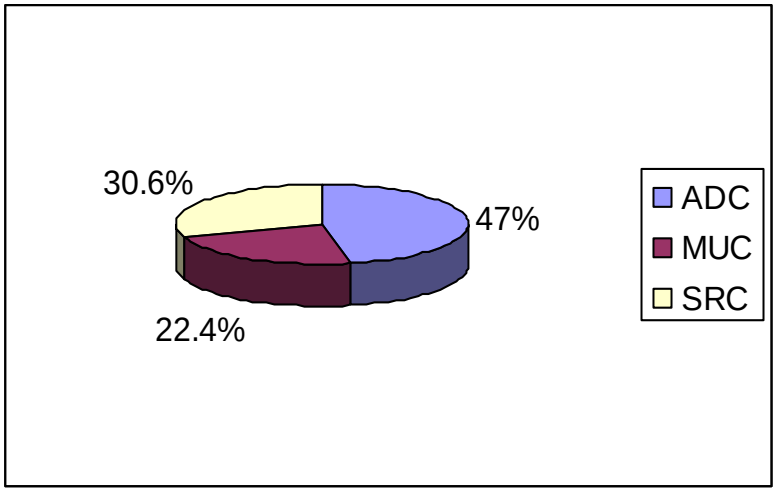
Results

This study included 49 cases of gastric carcinoma in addition to **6** cases of apparently normal gastric mucosa as a control.

The classification of studied gastric carcinoma cases according to histopathological types is illustrated in graph (1). Among the 49 examined carcinoma cases, there were **23(47%)** cases of adenocarcinoma type (ADC), **15**(30.6%) cases of signet ring cell carcinoma type (SRC) and **11** (22.4 %) cases of mucinous adenocarcinoma type (MUC).



Graph (1): Classification of the studied gastric carcinomas cases according to histopathological type.

-Age distribution of different histopathological types: -

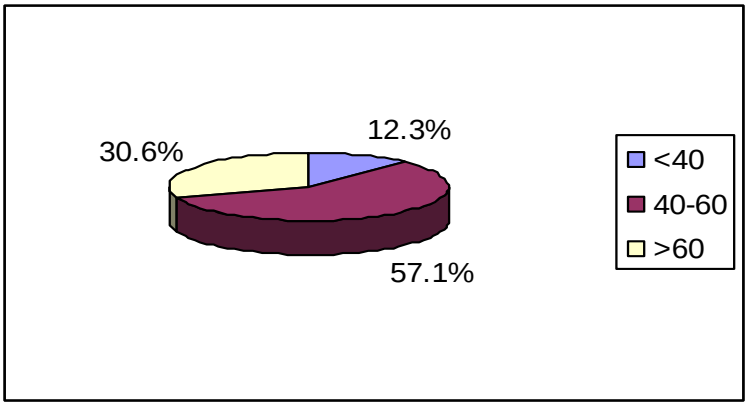
Age of studied 49 carcinoma cases ranged between **33** to **79** (**mean 55.5 ,SD± 12.11**).

Among the studied 49 cases; **6(12.3%)** cases were less than **40** years **, 28(57.1%)** cases were between **40-60** years, and **15 (30.6%)**cases were above **60** years and this is illustrated in (**Table 6&Graph 2).**

-80% of the signet ring cell carcinoma cases belonged to age group(40-60 years) .

Table(6):Age distribution of different histopathological types:

Histopathological types	No of cases	Age					
		<40 years		40-60		>60	
		no	%	No	%.	No	%
Adenocarcinoma	23	4	17.4	11	47.8	8	34.8
Mucinous adenocarcinoma	11	1	9	5	45.5	5	45.5
Signet ring cell carcinoma	15	1	6.6	12	80	2	13.4
Total	49	6	12.3	28	57.1	15	30.6



Graph(2):Age distribution of different histopahological types

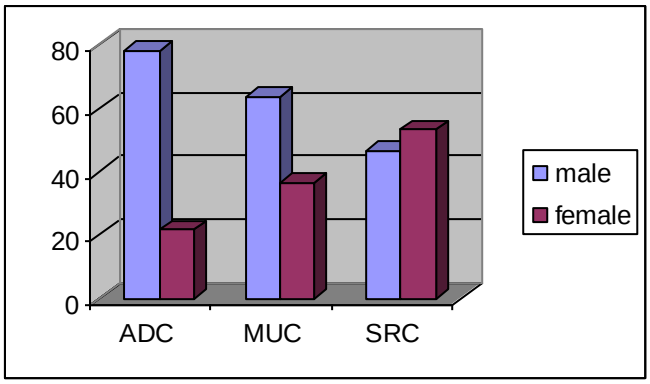
-Sex distribution of different histopathological type:

Among the studied cases; **32 (65.3%)** cases were males and**17 (34.7%)** cases were females and their distribution is illustrated in (**Table 7& Graph 3)**

So male: female ratio of the all 49 studied carcinoma cases was **(1.75:1).** But for the **15** studied signet ring carcinoma cases was (**1:1.14).**

Table(7):sex distribution of different histopathological types

Histopathological types	No of cases	Sex			
		Male		Female	
Adenocarcinoma	23	18	78.2	5	21.8
Mucinous adenocarcinoma	11	7	63.6	4	36.4
Signet ring cell carcinoma	15	7	46.7	8	53.3
Total	49	32	65.3	17	34.7



Graph (3): sex distribution of different histopathological types

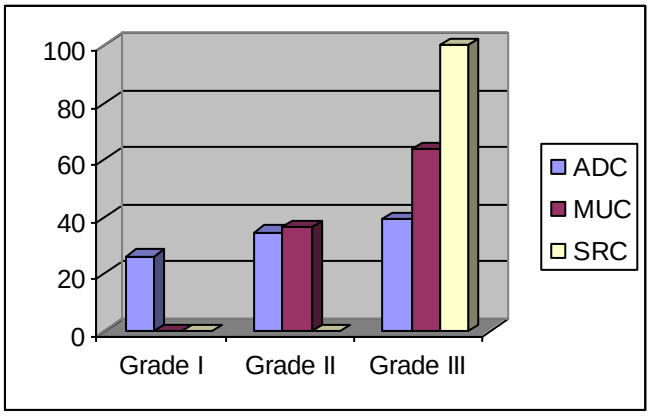
In relation to grading system:

Out of **49** carcinoma cases; **6**cases (**12.2**%) were grade I **,12** cases (**24.5%**) were grade II and **31** cases **(63.3%)** were grade III. their distribution is illustrated in
(**Table 8& graph 4).**

All signet ring cell carcinoma cases were high grade.

Table (8): Grading of different histopathological types.

Histopathological type	No. of cases	Grade I		Grade II		Grade III	
		No.	%	No.	%	No.	%
Adenocarcinoma	23	6	26.1	8	34.7	9	39.2
Mucinous adenocarcinoma	11	0	0	4	36.4	7	63.6
Signet ring cell carcinoma	15	0	0	0	0	15	100
Total	49	6	12.2	12	24.5	31	63.2



Graph (4): Grading of different histopathological types.

-In relation to the TNM staging system:

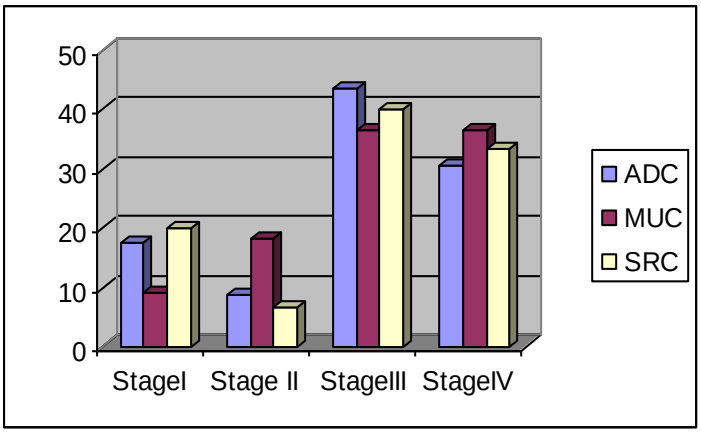
Among the **49** studied cases;

Stage I encountered in **16.3%** of cases, Stage II encountered in **10.2%** of cases, Stage III encountered in **40.8 %** of cases and Stage IV encountered in **32.7 % of cases.** Their distribution is illustrated in (**Table 9&Graph 5)**

Although the majority (**73.5**%) of the studied **49** carcinoma cases were **stage III** and **IV** of the different histopathological types, ***No statistically significant correlation between Histopathological type and TNM stage of the studied carcinoma cases was found (p value=0.764).***

Table (9): TNM staging of different histopathological types:

Histopathological type	No. of cases	Stage I		Stage II		Stage III		Stage IV	
		No.	%	No.	%	No.	%	No.	%
Adenocarcinoma	23	4	17.4	2	8.7	10	43.5	7	30.4
Mucinous adenocarcinoma	11	1	9.1	2	18.1	4	36.4	4	36.4
Signet ring cell carcinoma	15	3	20	1	6.7	6	40	5	33.3
Total	49	8	16.3	5	10.2	20	40.8	16	32.7



Graph (5): TNM staging of different histopathological types.

-Site distribution of different histopathological type:

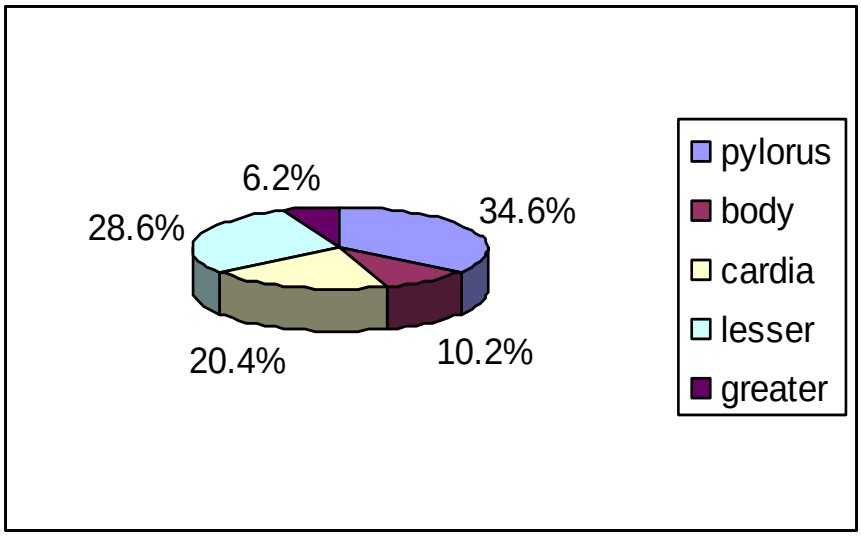
Out of **49** studied cases; **17(34.6 %)** cases were present in the pylorus and antrum , **5 cases (10.2 %)** were present in the body and fundus, **10 cases (20.4%)** were present in the cardia,**14 cases (28.6%**) were present in the lesser curvature and **3cases (28.6%)** were present in the greater curvature . This is illustrated in (**Table 10&Graph 6**)

-So the most site involved is the antro-pyloric region (**34.6%)** followed by lesser curvature **(28.6%)**.

-lesser curvature is involved more than the greater curvature.

Table (10): ***site distribution of different histopathological types:***

Histopathological type	No. of cases	Pylorus&antrum		Body& fundus		cardia		Lesser curvature		Greater curvature	
		No.	%	No.	%	N0	%	N0	%	N0	%
Adenocarcinoma	23	8	34.8	1	4.3	6	26.1	5	21.7	3	13.1
Mucinous adenocarcinoma	11	4	36.4	1	9	2	18.2	4	36.4	0	0
Signet ring cell carcinoma	15	5	33.3	3	20	2	13.4	5	33.3	0	0
Total	49	17	34.6	5	10.2	10	20.4	14	28.6	3	6.2



Graph (6): site distribution of different histopathological types.

-Relation between histopathological type and lymph nodes metastases:

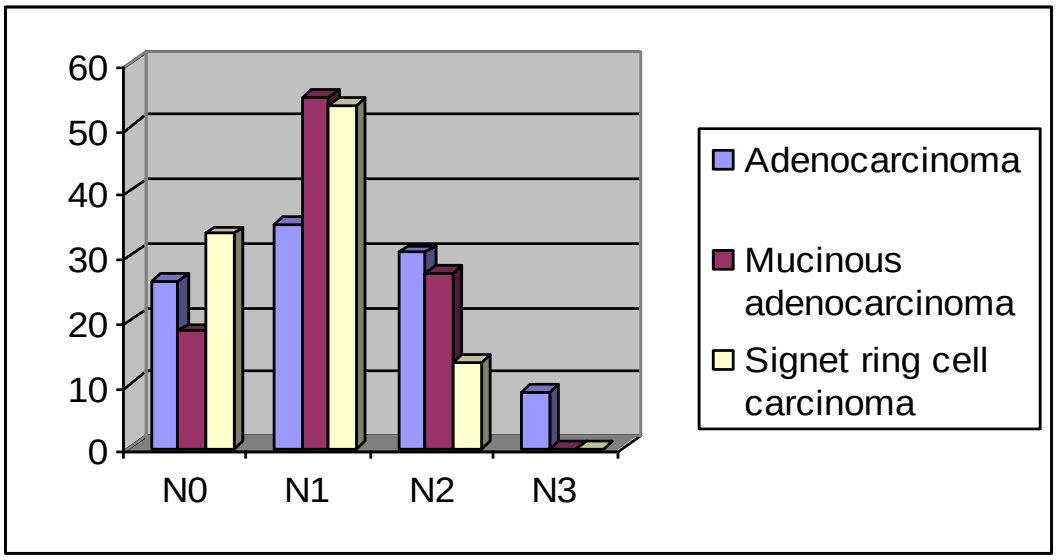
Out of the studied cases; **13** cases (**26.5%)** belonged to **N**0 group, 2**2** cases (**44.9%**) belonged to **N**1 group, **12**cases (**24.5%**) belonged to **N**2 group adenocarcinoma and **2** cases (**4.1%**) belonged to **N**3 group and this is illustrated in (Table 11&Graph 7).

- Most (44.9%) of the studied 49 cases belonged to N1 group.

-No statistically significant correlation between histopathological type of studied carcinoma cases and lymph nodes metastasis (P value=0.127).

Table (11): Relation between histopathological type and lymph nodes metastases:

Histopathological type	No. of cases	N0		N1		N2		N3	
		No.	%	No.	%	No.	%	No.	%
Adenocarcinoma	23	6	26.1	8	34.8	7	30.4	2	8.7
Mucinous adenocarcinoma	11	2	18.2	6	54.5	3	27.3	0	0
Signet ring cell carcinoma	15	5	33.3	8	53.3	2	13.4	0	0
Total	49	13	26.5	22	44.9	12	24.5	2	4.1



Graph (7): Relation between histopathological type and lymph nodes metastases.

Relation between depth of invasion and lymph nodes metastasis:

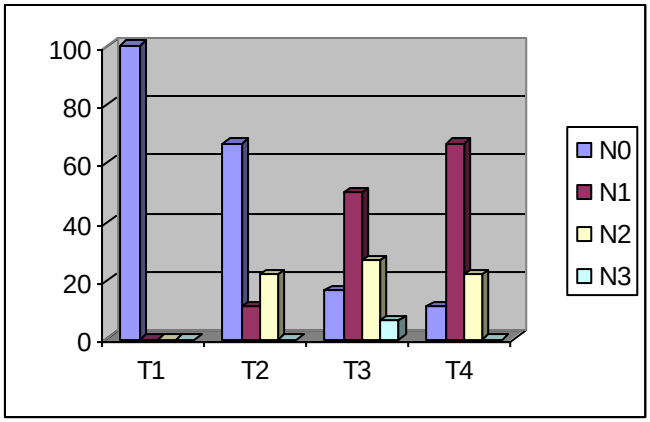
Among the studied cases**;**One case**(2.2%)** invaded lamina propria **(T1)** ,**9(18.3%)** cases invaded muscularis propria or subseroas**(T2),** 30(61.2%) cases penetrated serosa without invasion of the adjacent structures**(T3),** and 9 **(18.3%)**cases invaded the adjacent structures**(T4) .**

So, 30(61.2%) cases belonged to **T3** group of which **46.7 %** belonged to **N1** group. The number of metstatic lymph nodes in each group is illustrated in (**Table 12&Graph8**).

-There is a statistically significant correlation between depth of invasion of the studied carcinoma cases and lymph node metastasis (p value= 0.034).As with increase depth of tumor invasion, there is an increase in the number of metastatic lymph nodes.

Table (12): Relation between depth of invasion and lymph nodes metastasis:

Depth of invasion	No. of cases	Lymph node metastasis							
		N0		N1		N2		N3	
		No.	%	No.	%	No.	%	No.	%
T1	1	1	100	0	0	0	0	0	0
T2	9	6	66.7	2	22.2	1	11.1	0	0
T3	30	5	16.7	14	46.7	9	30	2	6.6
T4	9	1	11.1	6	66.7	2	22.2	0	0
Total	49	13	26.5	22	44.9	12	24.5	2	4.1



Graph (8): Relation between depth of invasion and lymph nodes metastasis.

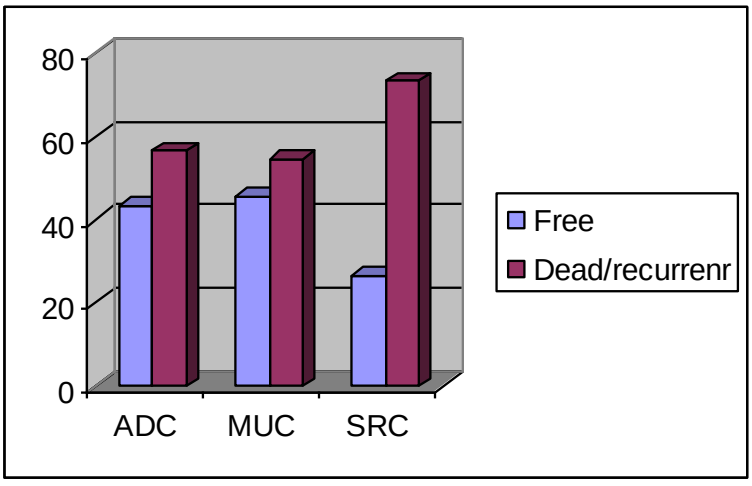
Relation between histopathological types and 2- years survival:-

As regarding survival of patients within 2 years after gastrectomy, **19** cases **(38.8%)** were disease –free and **30** cases (**61.2%**) died or showed disease recurrence. Their distributions are illustrated in (**Table 13&Graph 9**)

-No statistically significant value between histopathological type of the studied carcinoma cases and 2- years survival (p value=0.563).

Table (13): Relation between histopathological types and 2- years' survival:

Histopathological type	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
Adenocarcinoma	23	10	43.4	13	56.6
Mucinous adenocarcinoma	11	5	45.5	6	54.5
Signet ring cell carcinoma	15	4	26.7	11	73.3
Total	49	19	38.8	30	61.2



*Graph **(9): Relation between histopathological types and 2- years' survival***

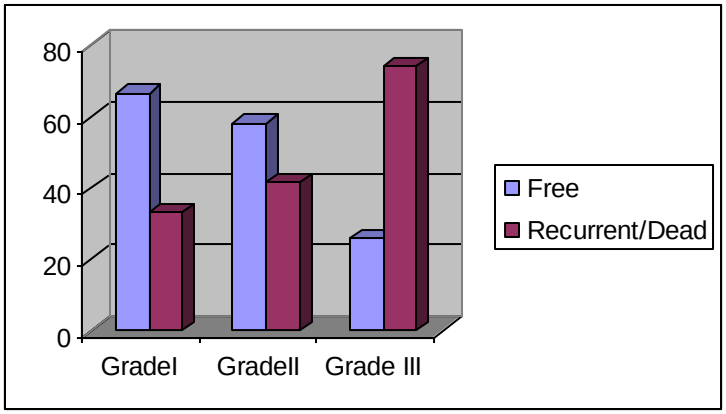
Correlation between grade and 2-years survival:

-Out of **19** of disease free survival cases; **11**cases **(61.1%)** were low grade (I &II) and 8cases (**25.8%)** were high grade (III). On the other side, out of **30** recurrent/dead cases; **7**cases (**38.9%)** was low grade(I&II) and **23** cases (**74.2%)** were high grade (III). This is illustrated in (**Table 14&Graph10**).

-***There is a statistically significant correlation between grade of the studied carcinoma cases and 2 years survival (p value=0.017).***

Table (14): Correlation between grade and 2-years survival:

Grade	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
Grade I	6	4	66.7	2	33.3
Grade II	12	7	58.3	5	41.7
Grade III	31	8	25.8	23	74.2
Total	49	19	38.8	30	61.2



Graph (10): Correlation between grade and 2-years survival.

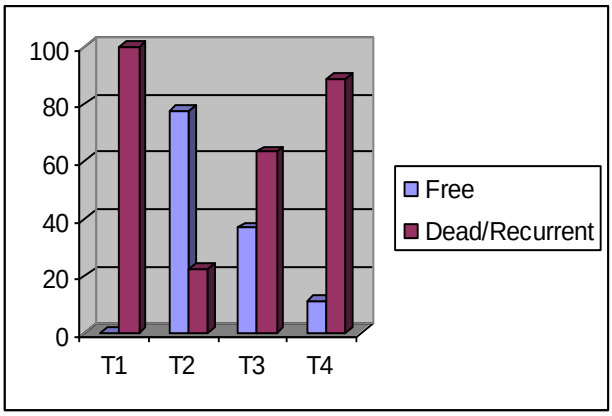
Correlation between depth of invasion and 2-years survival:

-Out of **19** of disease free survival cases; 7 cases **(77.8%)** wereT2 , **11** cases (**36.7%)** were T3 and **one** case (**11.1**%)was T4.
-Out of **30** recurrent/dead cases; **one** case (**100%**) was T1 , **2** cases (**22.2 %)** were T2, **19** cases **(63.3%)** wereT3 and **8 c**ases **(88.9 %)** were T4. This is illustrated in (**Table 15&Graph11**)

-There is a statistically significant correlation between depth of invasion and 2- years survival (p value =.022). As with increase depth of tumor within the gastric wall, there is an increase in the percentage of cases that showed disease recurrence or death 2 years after gastrectomy.

Table (15): Correlation between depth of invasion and 2-years survival:

Depth of invasion	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
T1	1	0	0	1	100
T2	9	7	77.8	2	22.2
T3	30	11	36.7	21	63.3
T4	9	1	11.1	9	88.9
Total	49	19	38.8	30	61.2



Graph (11): Correlation between depth of invasion and 2-years survival

Correlation between lymph nodes metastasis and 2-years survival:

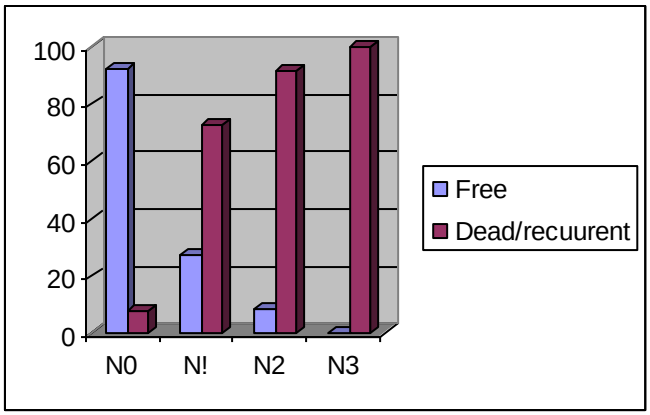
-Out of **19** of 2-years disease free cases; **12** cases (**92.3%)** were N0,**6** cases (**27.3%)** were N1 and **one case (8.3%**) was N2.

-out of 30 recurrent/dead cases; one case **(7.7%)** was N0, **16**cases **(72.7%)** were N1, **11** cases **(91.7%)** were N2 and 2 cases **(100%)** were N3. This is illustrated in (**Table 16&Graph 12**)

-There is a highly statistically significant correlation between lymph nodes metastasis and 2 –years survival (p<0.001) As with increase number of metastatic regional lymph nodes , there is an increase in the percentage of cases that showed disease recurrence or death 2 years after gastrectomy.

Table (16): Correlation between lymph nodes metastasis and 2-years survival:

Lymph nodes metastasis	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
N0	13	12	92.3	1	7.7
N1	22	6	27.3	16	72.7
N2	12	1	8.3	11	91.7
N3	2	0	0	2	100
Total	49	19	38.8	30	61.2



Graph (12): Correlation between lymph nodes metastasis and 2-years survival.

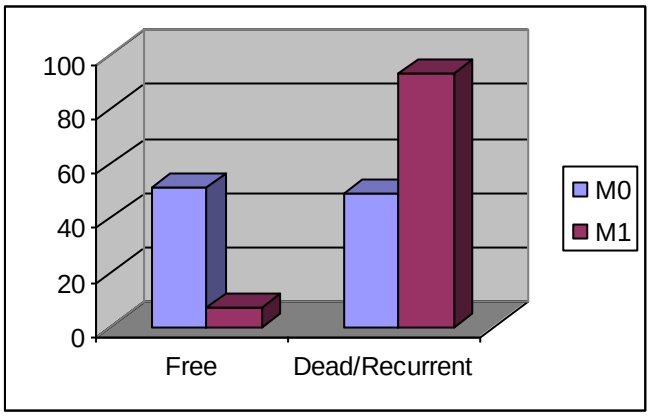
- Correlation between distant metastasis and 2-years survival:

-Out of **19** cases of 2-years disease free, 18 cases (51.4%) showed no distant metastasis and one case (7.1%) showed distant metastasis.
While out of **30** recurrent/dead cases; **17**cases (**48.6**%) showed no distant metastasis and **13** cases (**92.9**%) showed distant metastasis. This is illustrated in (**Table 17&Graph 13**).

-There is a statistically significant correlation between distant metastasis and 2-years survival (p value =0.003). As 51.4% of cases without distant metastasis were disease free, while 92.9 % of the cases with distant metastasis showed disease recurrence or death 2 years after gastrectomy.

Table (17): Correlation between distant metastasis and 2-years survival:

Distant metastasis	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
M0	35	18	51.4	17	48.6
M1	14	1	7.1	13	92.9
Total	49	19	38.8	30	61.2



Graph (13): Correlation between distant metastasis and 2-years survival

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- Correlation between TNM stage and 2-years survival:

-Out of **19** of disease free survival cases; 7 cases (**87.5%)** were stage I, 4cases**(80%)** were stage II ,7 cases (35%) cases were stage III and one case was stage IV.

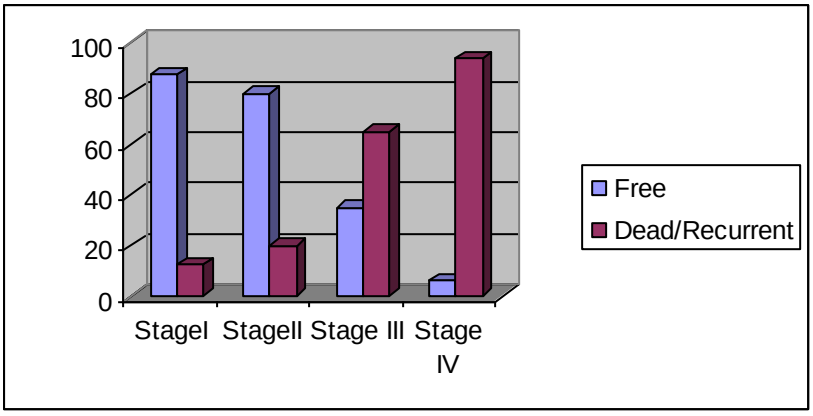
-out of 30 recurrent/dead cases; one case (12.5%) was stage I, **one** case (**20%**) was stage II ,**13** cases(**65%)** were stage III and **15** cases **(93.7%)** were stage IV.

. This is illustrated in (**Table 18&Graph 14**)

-There is a statistically significant correlation between TNM stage and 2-years survival after gastrectomy (p value <0.001). As 87.5%, 80%, 35 % and 6.3 % of stage I, Stage II, Stage III and Stage IV respectively were disease free 2 years after gastrectomy**.**

Table (18): Correlation between TNM stage and 2-years survival:

TNM stage	No. of cases	Free		Recurrent /dead	
		No.	%	No.	%
stageI	8	7	87.5	1	12.5
stageII	5	4	80	1	20
stageIII	20	7	35	13	65
stageIV	16	1	6.3	15	93.7
Total	49	19	38.8	30	61.2



Graph (14): Correlation between TNM stage and 2-years survival:

Immunohistochemical results

In the control group, the normal gastric mucosa showed high expression of nuclear brown immunostaining for p27antibody (>47%).

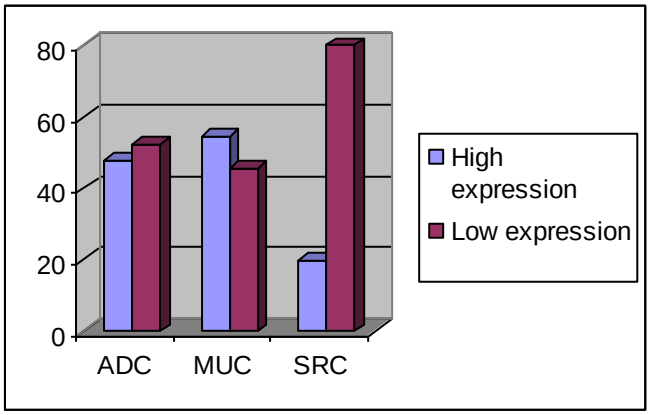
-Expression of p27 in different histopathological types of studied gastric cases:

-Out of the **49** studied carcinoma cases, **20** cases **(40.8%)** showed high nuclear expression of p27and **29** cases (**59.2%)** showed low expressions or absent expression. Their histopathological distribution is illustrated in **(Table 19&Graph 15)**

-No statististically significant correlation between p27 expression and histological type. (P value =0.197)

Table (19): Expression of p27 in different histopathological types of studied carcinoma cases:

Histopathological types	No. of cases	High expression >47%		Low /absent expression ≤47%	
		No.	%	No.	%
Adeno carcinoma	23	11	47.8	12	52.2
Mucinous adenocarcinoma	11	6	54.4	5	45.6
Signet ring cell carcinoma	15	3	20	12	80
Total	49	20	40.8	29	59.2



Graph (15): Expression of p27 in different histopathological types of studied carcinoma cases

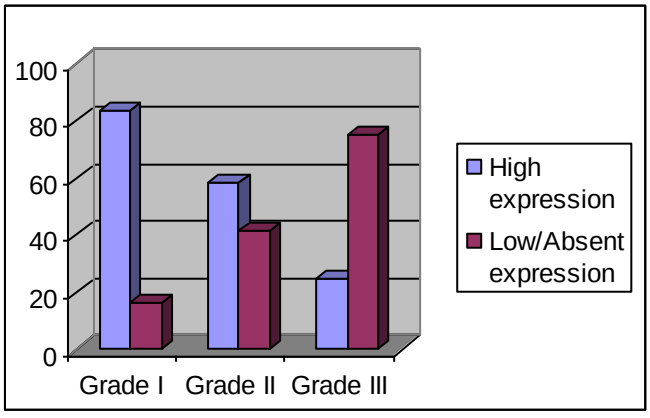
Correlation between p27 expression and grade:-

Out of the **20** cases which showed high p27 expression **12** cases (**66.7%)** were low grade (Grade I&II) **and 8** cases **(25%)** were high grade(GradeIII) . While Out of the **29** cases which showed low or absent p27 expression **6** cases **(33.3%)** were low grade (I&II)**and 23** cases **(75%)** were high grade(III). This is illustrated in (**Table20&Graph 16).**

-There is a highly statistically significant correlation between p27 expression and grade (P value=0.002).*As high expression of p27 was seen in (70.6%) of low grade(GradeI&II) tumors as compared to (25%) only of high grade tumor(GradeIII).*

Table (20): Correlation between p27 expression and grade of studied cases :

Grade	No. of cases	High expression>47%		Low/absent expression≤47%	
		No.	%	No.	%
Grade I	6	5	83.3	1	16.7
Grade II	12	7	58.3	5	41.7
Grade III	31	8	25	23	75
Total	49	20	40.8	29	59.2



Graph (16): Expression of p27 in different histopathological grades .

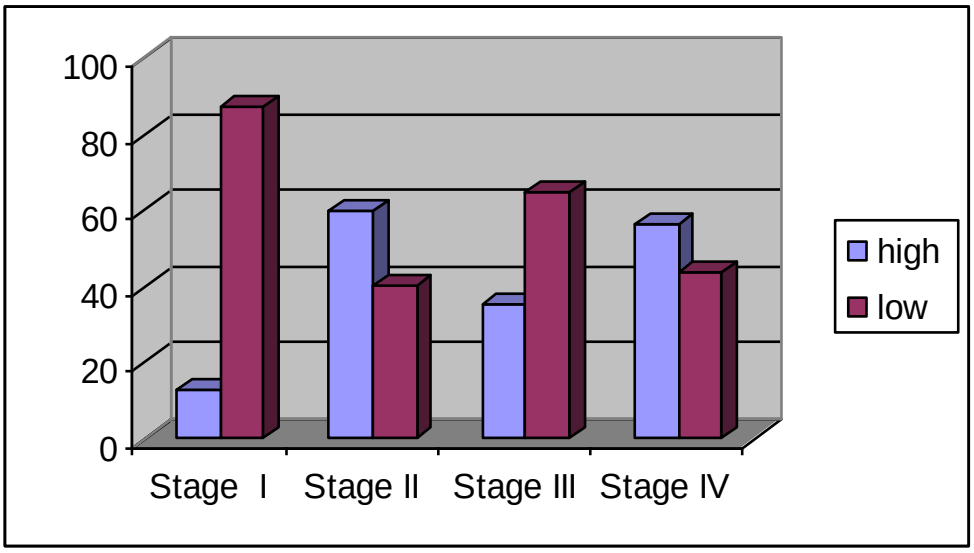
-Correlation between p27 expression and stage:

- Out of the **20** cases which showed high p27 expression **, 4** cases (50%) **, 3** cases **(60%)** , **9** cases (**45%**) and **4** cases(**25%**) were belonged to StageI, StageII, Stage III and Stage IV respectively. While out of the **29** cases which showed low or absent p27 expression **4** cases **(50%)**, **2**cases **(40%),11** (**55%),** and **12** cases **(75%)** were belonged to StageI, StageII, Stage III and Stage IV respectively. This is illustrated in (**Table 21&Graph 17)**.

-No statistically significant correlation between p27 expression and stage. (P value =0.171)

Table (21): Correlation between p27 expression and TNM stage:

Stage	No. of cases	High expression>47%		Low /absent expression≤47%	
		No.	%	No.	%
Stage I	8	4	50	4	50
Stage II	5	3	60	2	40
Stage III	20	9	45	11	55
Stage IV	16	4	25	12	75
Total	49	20	40.8	29	59.2



Graph (17): Correlation between p27 expression and TNM stage.

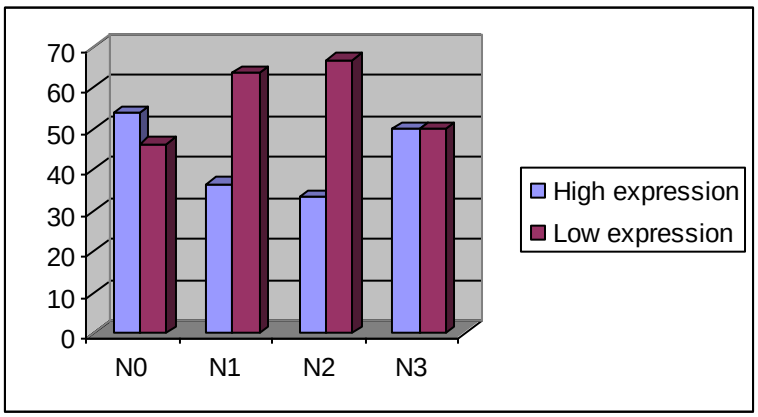
-Correlation between p27 expression and lymph nodes metastasis:

- Out of the **20** cases which showed high p27 expression **, 7**cases (**53.8%) , 8** cases **(36.4%)** , **4** cases **(33.3%)** and **one** case**(50%)** were belonged to N0, N1, N2,and N3 respectively. While out of the **29** cases which showed low or absent p27 expression **6** cases **(46.2%)** , **14** cases **(63.6%) ,8 (66.7%)** cases and one case **(50%)** were belonged N0, N1, N2 and N3 respectively . This is illustrated in **(Table 22&Graph 18) .**

-No statistically significant correlation between p27 expression and lymph node metastasis (P value =0.440).

Table (22) Correlation between p27 expression and lymph nodes metastasis:

Lymph nodes metastasis	No. of cases	High expression>47%		Low/absent expression ≤47%	
		No.	%	No.	%
N0	13	7	53.8	6	46.2
N1	22	8	36.4	14	63.6
N2	12	4	33.3	8	66.7
N3	2	1	50	1	50
Total	49	20	40.8	29	59.2



Graph(18): Correlation between p27 expression and lymph nodes metastasis.

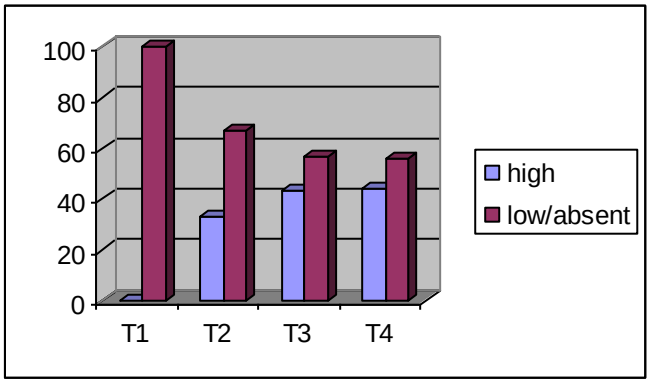
-Correlation between p27 expression and depth of invasion:

- Out of the **20** cases which showed high p27 expression , **6** cases **(66.7%)** , **12** cases **(40%),** and **2 (22.2%)** cases were belonged to T2 ,T3 andT4 respectively. While out of the **29** cases which showed low or absent p27 expression one **case (100%)**, **3** cases (33.3%), **18 (60%)** cases and **7 (77.8%)** cases were belonged to T1, T2, T3 andT4 respectively. This is illustrated in (**Table 23&Graph 19**).

-No statististically significant correlation between p27 expression and depth of invasion of the studied cases(P value =0.173) .

Table (23):-Correlation between p27 expression and depth of invasion:

Depth of invasion	No. of cases	High expression>47%		Low/absent expression≤47%	
		No.	%	No.	%
T1	1	0	0	1	100
T2	9	6	66.7	3	33.3
T3	30	12	40	18	60
T4	9	2	22.2	7	77.8
Total	49	20	40.8	29	59.2



Graph (19):-Correlation between p27 expression and depth of invasion

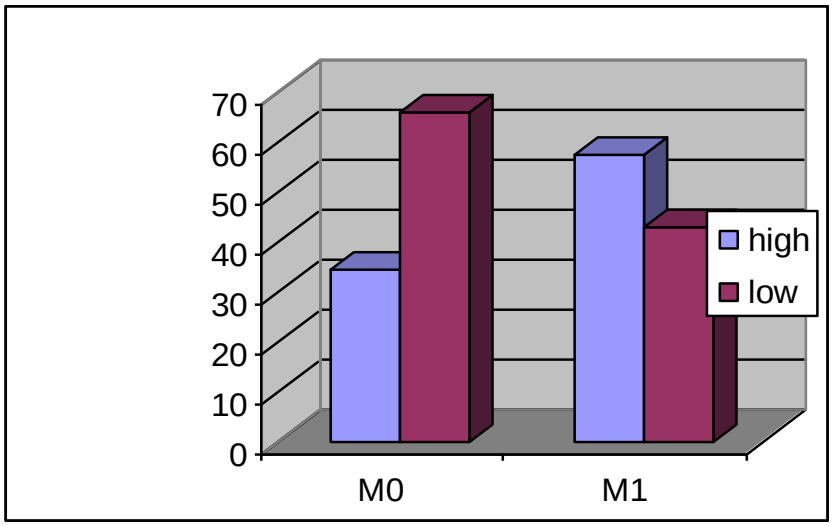
-Correlation between p27 expression and distant metastasis:

Out of the **20** cases which showed high p27 expression ., **17**cases **(48.6%)** were without distant metastasis and **3** cases **(21.4%)**showed distant metastasis.. While Out of the **29** cases which showed low or absent p27 expression **18** cases **(51.4%)** were showed no distant metastasis and **11** cases **(78.6%)**showed distant metastasis. This is illustrated in (**Table 24&Graph 20).**

-No statistically significant correlation between p27 expression and distant metastasis. (P value =0.084)

Table (24): Correlation between p27 expression and distant metastasis:

Distant metastasis	No. of cases	High expression >47%		Low/absent expression≤47%	
		No.	%	No.	%
M0	35	17	48.6	18	51.4
M1	14	3	21.4	11	78.6
Total	49	20	40.8	29	59.2



Graph (20): Correlation between p27 expression and distant metastasis.

-Correlation between p27 expression and 2-years survival :

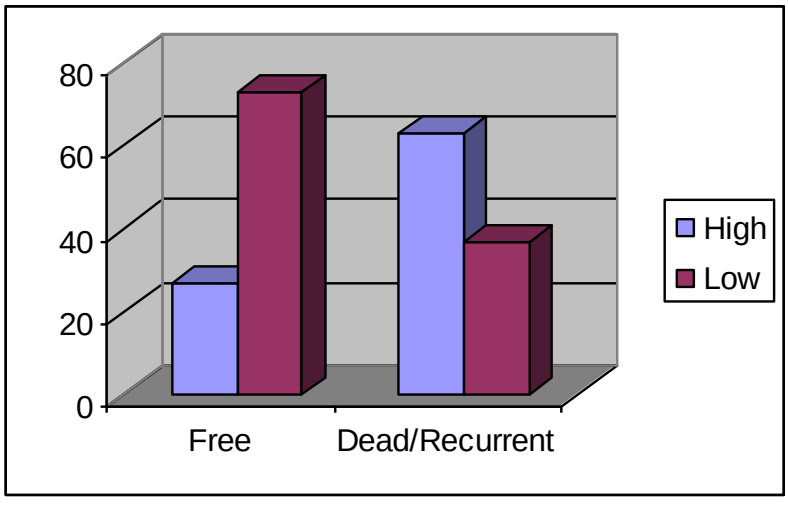
-Out of **19** of disease free survival cases ; **12** cases **(63.1%)** showed high expression of p27 and **7** cases **(36.9 %)** showed low or absent p27expression.

-Out of **30** cases which showed disease recurrence or died ;**8** cases (**26.7%)** showed high expression of p27 and **22** cases **(73.3%)** showed low or absent expression**.** This is illustrated in (**Table 25&Graph 21)** .

-There is a statistically highly significant correlation between p27 expression and 2-years survival (p value=0.011). *As (63.1%) of disease free cases showed high p27 expression as compared to only (26.7%) of cases who died or showed disease recurrence 2 years after gastrectomy.*

Table (25): Correlation between p27 expression and 2-years survival :

2-years survival	No. of cases	High expression>47%		Low/absent expression≤47%	
		No.	%	No.	%
Died/recurrent	30	8	26.7	22	73.3
Free	19	12	63.1	7	36.9
Total	49	20	40.8	29	59.2



Graph (21): Correlation between p27 expression and 2-years survival

AgNORs Results

In all studied lesions, clearly defined silver-stained brown/black dots or blebs were observed in a yellow nuclei. These are arranged into one or more clusters, or occurred as individual single dense dots.

In normal gastric mucosa of the control cases , the AgNORs appeared as small, rounded, dense dots of uniform size and shape inside the yellow nuclei.

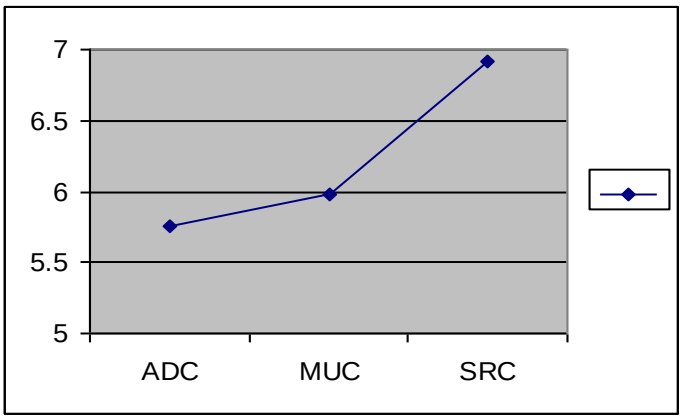
In the carcinoma cases, the nuclei contained large number of AgNORs, which showed more tendencies to be pleomorphic both in shape and size, with some tendency to clumping. Some clusters are formed of small, dense irregular dots arranged at the periphery of the nucleoli.

-mean no of AgNORs in different histopathological group:

There is no statistically significance correlation between mean AgNORs count and histopathological type. (p value=0.549)

Table (26): mean no of AgNORs in different histopathological groups:

Histopathological types	No of cases	AgNORs		
		Range	Mean	Sd±
Adenocarcinoma	23	2.9-8.3	5.77	1.86
Mucinous adenocarcinoma	11	4.3-8.4	5.99	1.44
Signet ring carcinoma	15	3.3-8.5	6.13	1.73
Total	49	2.9-8.5	5.91	1.68



Graph(22): mean number of AgNORs count in studied carcinoma cases.

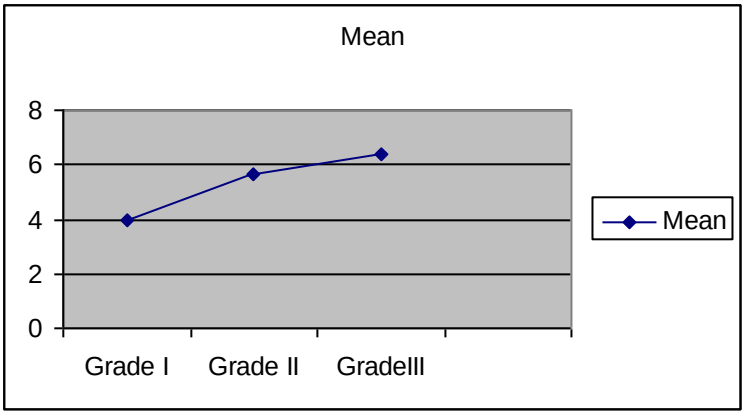
-Relation between mean AgNORs count /cell and histopathological grade:

There was an increase in mean number of AgNORs progressing from low grade (I&II) cases**(=5.10**) to be more in high grade (III)cases **(=6.39**) indicating increase in proliferation pattern with higher grades.

There is a highly statistically significant correlation between mean AgNORs count and histopathological grade (p value=0.001).

Table (27): Relation between mean AgNORs count /cell and histopathological grade:

Grade	No of cases	AgNORs	
		Mean	Sd±
Grade I	6	3.95	0.96
Grade II	12	5.67	1.43
Grade III	31	6.39	1.61
Total	49	5.91	1.68



Graph (23): Relation between mean AgNORs count /cell and histopathological grade.

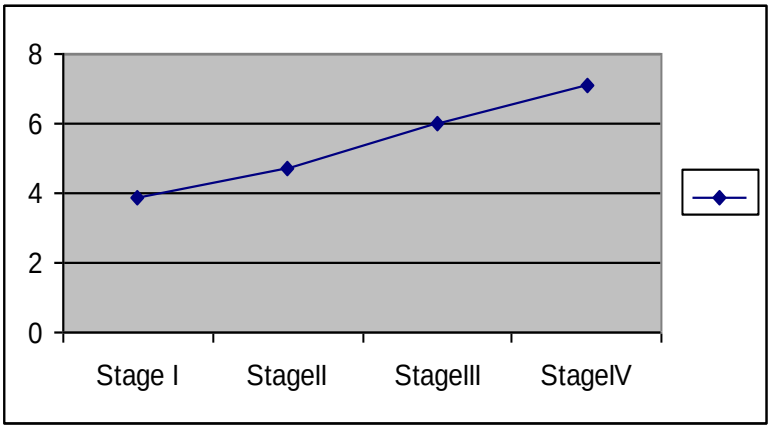
Relation between AgNORs count andTNM stage:

With progression from stage I to stage IV lesions, there was a progresssive increase in mean number of AgNORs /cell indicating an increase in proliferation pattern with higher stages.

There is a statistically significant correlation between mean AgNORs count and TNM stage was regarded (p value<0.001)

Table(28):Relation between AgNORs count andTNM stage:

TNM stage	No of cases	AgNORs	
		Mean	Sd±
Stage I	8	3.91	1.03
Stage II	5	4.82	1.01
Stage III	20	6.05	1.35
Stage IV	16	7.10	1.39
Total	49	5.91	1.68



Graph(24): Relation between AgNORs count andTNM stage

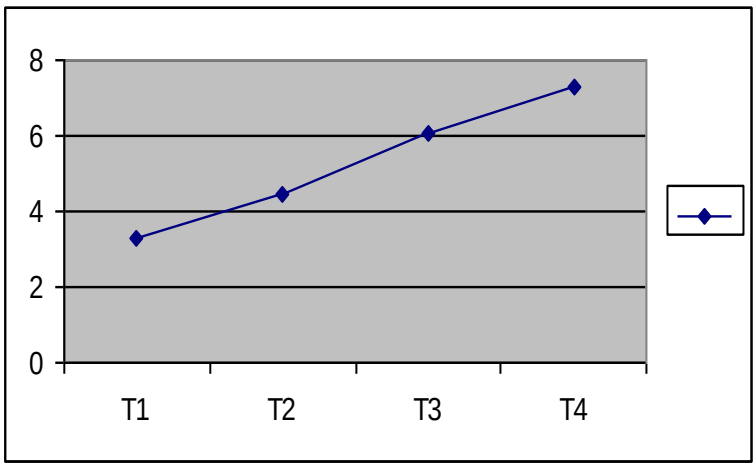
-Relation between mean AgNORs count /cell and depth of invasion:

The results showed that there significant differences in the mean AgNORs per cell at the different depths of invasion . The mean AgNORs count/cell progressively increases as the depth of tumor into the gastric wall increases.

There is a highly statistically significant correlation between AgNORs count per cell and different depths of invasion was regarded (p value<0.001).

Table(29):Relation between mean AgNORs count /cell and depth of invasion:

Depth of invasion	No of cases	AgNORs	
		Mean	Sd±
T1	1	3.30	
T2	9	4.38	1.22
T3	30	6.05	1.46
T4	9	7.29	1.42
Total	49	5.91	1.68



Graph (25): Relation between mean AgNORs count /cell and depth of invasion

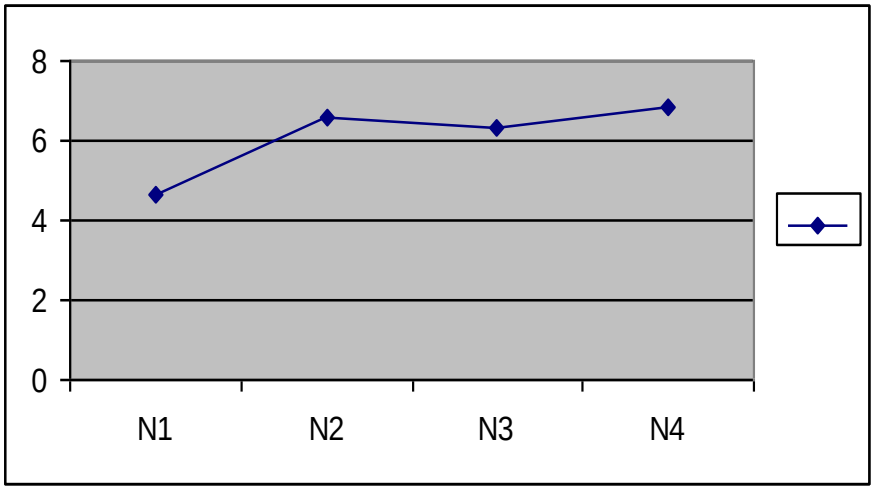
Relation between mean AgNORs count /cell and lymph nodes metastasis:

The results showed that with increased number of metastatic regional lymph nodes,there was increase in the mean number of nucleolasr organizer regions per cell indicating an increases in proliferation pattern.

A highly statistically significant correlation between mean AgNORs count and number of metastatic regional lymph nodes was regarded (p value=0.002).

Table (30): Relation between mean AgNORs count /cell and lymph nodes metastasis:

Lymph node metastasis	No of cases	AgNORs	
		Mean	Sd±
N0	13	4.42	1.34
N1	22	6.49	1.56
N2	12	6.33	1.34
N3	2	6.85	1.77
Total	49	5.91	1.68



Graph (26): Relation between mean AgNORs count /cell and lymph nodes metastasis.

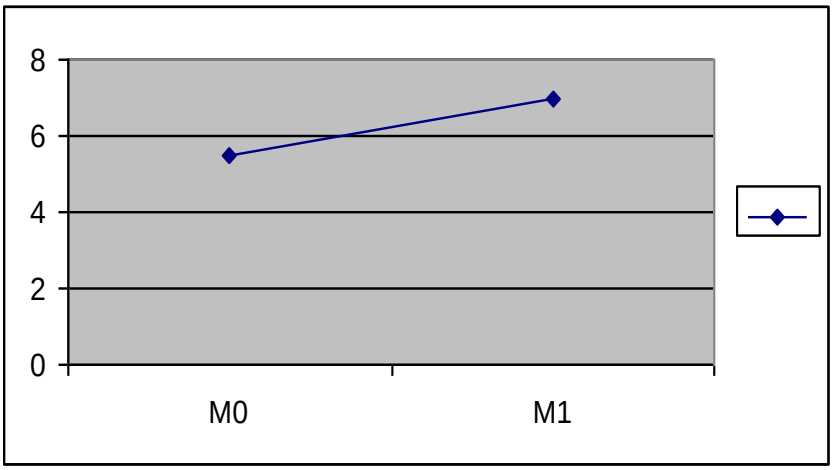
-Relation between mean AgNORs count /cell and distant metastasis:

-The results showed that non metastatizing cases showed mean number of AgNORs 5.36±1.54 while cases with distant metastasis showed mean number of AgNORs 7.30±1.16.

- ***A statistically significant correlation between mean AgNORs count and distant metastasis was detected. (P value<0.001)***

Table(31): Relation between mean AgNORs count /cell and distant metastasis:

Distant metastasis	No of cases	AgNORs	
		Mean	Sd±
M0	35	5.36	1.54
M1	14	7.30	1.16
Total	49	5.91	1.68



Graph (27): Relation between mean AgNORs count /cell and distant metastasis:

Relation between mean AgNORs count and 2-years survival :-

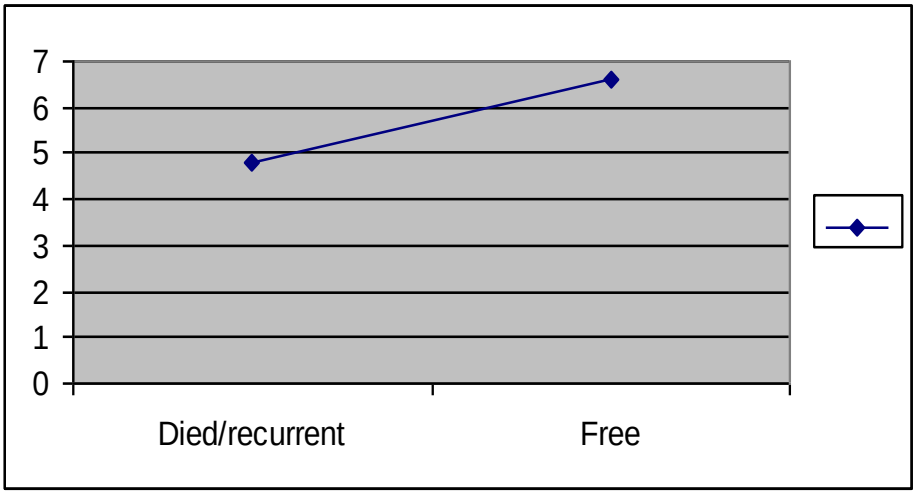
Cases which showed 2-years free survival (19) cases had mean number of AgNOR/cell **5.15±1.59.**

While cases who died or showed recurrence (30) cases had mean number of AgNOR/cell **6.40±1.58.**

There is a statistically highly significant correlation between mean AgNORs count and 2-years survival. (P value=0.009)

Table (32):Relation between mean AgNORs count and 2-years survival :

2-years survival	No of cases	AgNORs	
		Mean	Sd±
Died/ Recurrent	30	6.40	1.58
Free	19	5.15	1.59
Total	49	5.91	1.68



Graph (28):Relation between mean AgNORs count and 2-years survival

(2)-p27 expression in relation toAgNORs count:

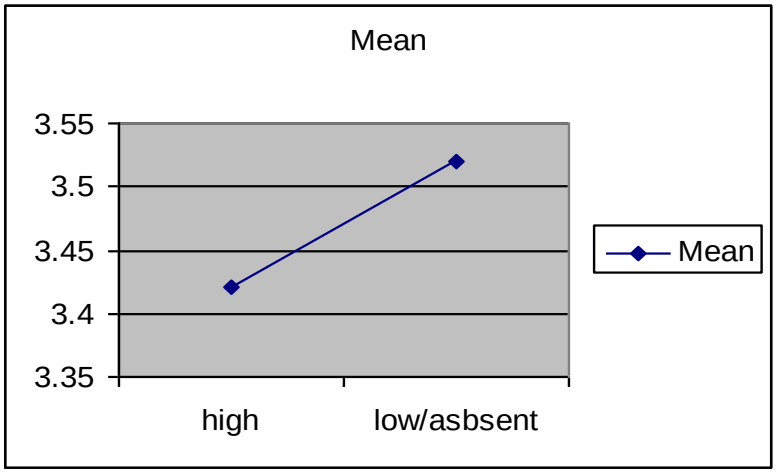
Cases which showed high expression of p27(20) cases had mean number of AgNOR/cell 5.34 ±1.69 .

While cases who showed low or absent expression of p27 had mean number of AgNOR/cell 6.31 ±1.58 .

-There is a statistically significant correlation between p27 expression and mean AgNORs count per cell (p value=0.047).*As with decrease p27 expression, there is an increase in the mean of AgNORs count per cell indicating increase in the cell proliferation rate.*

Table(33):p27 expression in relation to AgNORs count:

p27 expression	No of cases	AgNORs	
		Mean	Sd±
High Expression	20	5.34	1.69
Low/ absent Expression	29	6.31	1.58
Total	49	5.91	1.68



graph (29):p27 expression in relation toAgNORs count.

(Table 34) :Correlations between p27 expression , AgNORs score anf different clinicopathological variants.

Clinicopathogical variants		p27 expression		P value	AgNORs score		P value	2-year survival
		High %	Low %		High %	Low %		
Histopathological types	ADC	47.8	52.2	0.197	47.9	52.1	0.549	Insignificant
	MUC	54.4	45.6		36.4	63.6		
	SRC	20	80		66.7	33.3		
Grade	Low	70.6	29.4	0.001	38.9	61.1	0.008	significant
	High	25	75		58.1	41.9		
TNM Stage	I	50	50	**0.171**	12.5	87.5	<0.001	Highly significant
	II	60	40		20	80		
	III	45	55		55	45		
	IV	25	75		75	25		
Depth of invasion	T1	0	100	**0.173**	0	100	< 0.001	Highly significant
	T2	66.7	33.3		22.2	77.8		
	T3	40	60		53.3	46.7		
	T4	22.2	77.8		77.8	22.2		
Lymph node metastasis	N0	53.8	46.2	**0.440**	23.1	76.9	0.002	Highly significant
	N1	36.4	63.6		59.1	40.9		
	N2	33.3	66.7		66.7	33.3		
	N3	50	50		50	50		
Distant metastasis	M0	48.6	51.4	**0.171**	37.2	62.8	< 0.001	Highly significant
	M1	21.4	78.6		85.7	14.3		
2-Years survival	Dead/ recurrent	26.7	73.3	**0.011**	60	40	0.009	Highly significant
	Free	63.1			36.8	63.2	36.9	