

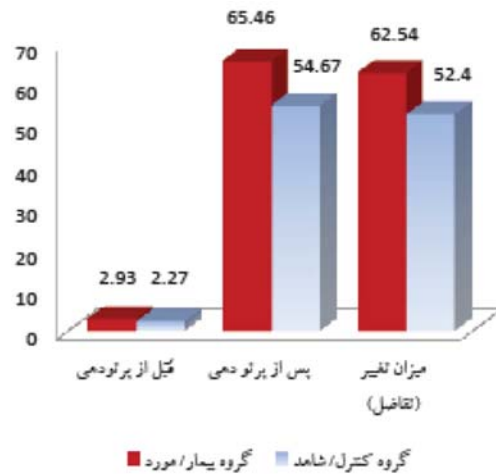
**Table 1)** Comparison of the demographic data of the patient group (n=32) and healthy group (n=30 persons)

Variable	Control Group	Patient Group	Significance Level	Statistical Test Specification
Age	31.33±7.35	53.25±13.28	*0.0001	T student(t=8.107;df=48.9)
Number of Pregnancy	0.67±1.15	2.81±1.78	*0.0001	Chi square(x <sup>2</sup> =29.05;df=6)
Age of the First Pregnancy	19.63±3.33	22.27±4.88	0.164	T student (t=1.426;df=60)
Age of the Onset of Menstruation	13.72±1.67	13.85±1.59	0.772	T student(t=0.292;df=60)
Age of onset of menopause	40.50±9.19	46.53±6.33	0.234	T student (t=1.336;df=60)

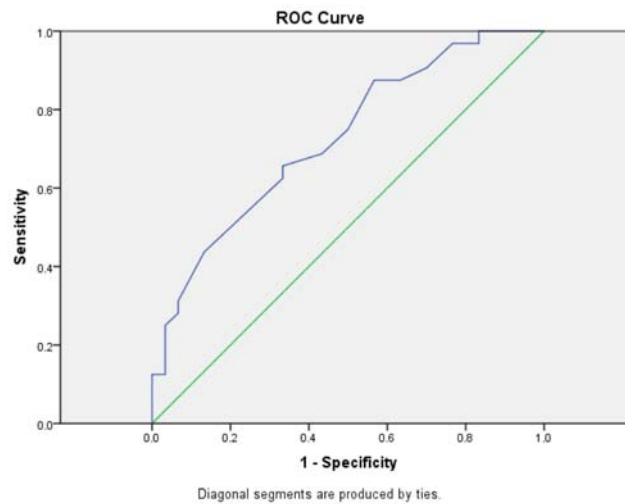
\*Significant difference between the two groups

**Table 2)** Distribution of Absolute and Relative frequency of (numbers in Parenthesis as percent) the status of receptors of Estrogen, Progesterone, P53 and HER-2 in tumors of Patients With non-inherited breast cancer

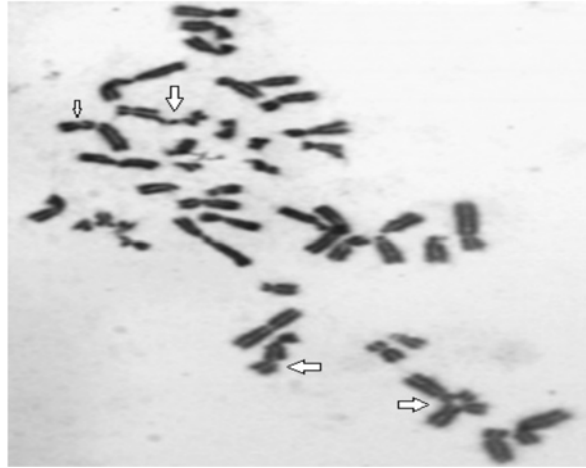
<b>Receptors</b>	<b>Positive</b>	<b>Negative</b>
Estrogen	21(75.0)	7(25.0)
Progesterone	17(63.0)	10(37.0)
P53	5(19.2)	21(80.8)
HER-2	5(19.2)	21(80.8)



**Chart 1)** Comparison of mean percent abnormal cells in both patient and control groups before and after irradiation. Paired t-test was used to compare the mean of the results before and after irradiation in each patient group ( $t = 31.32$ ;  $df = 31$ ;  $p \leq 0.0001$ ), and control group ( $t = 20.98$ ;  $df = 29$ ;  $p \leq 0.0001$ ). Student's T test was used to compare the mean of the results between the two groups before and after the irradiation ( $t = 0.831$ ;  $df = 60$ ;  $p \leq 0.0001$ ), after irradiation ( $t = 381.3$ ;  $df = 60$ ;  $P = 0.001$ ) and the difference before and after irradiation ( $t = 3.187$ ;  $df = 60$ ;  $p = 0.002$ )



**Chart 2)** the ROC curve and the C-statistics, critical point for the index of number of abnormal cells in the  $\gamma$  sensitivity test at G2, odds ratio, sensitivity and specification at critical point were calculated. Percentage of non-normal cells after irradiation: AUC=0.725, Std .Error = 0.064, CI95% = 0.6-0.85, p = 0.002, c=61, p=0.021 (Fisher test), OR =3.818, CI95%=1.332-10.942, sensitivity = 65.6% and specificity = 66.6%. ROC Curve =The curve of the characteristics of the receiver, AUC= below the curve above 0.05 that was significant, and with p less than 0.05, the value of the test was more than that of the luck in the patient's differentiation from healthy. CI 95% = 95% confidence interval; C = critical point for the most suitable number in the test for positive or negative examination of the test. OR= The ratio of odds that showed that people with a positive test can be patient as many time as the people with negative test. The confidence interval was calculated up to 95%.



**Figure 1)** A sample of clefts and fractures and a four radiant form observed in a person with breast cancer after irradiation



**Figure 2)** A sample of clefts and fractures observed in a healthy person after irradiation