

Table 1. Distribution of studied groups according to marital state, use of contraception, menopausal status and breast feeding

		BC	Control		
Reproductive factors		No. (%)	No. (%)	Chi square	P value
Marital state	Married	24(96%)	14(56%)		
	Single	1(4%)	11(44%)	18.000	<0.001 (HS)
Use of contraception	Yes	13(52%)	8(32%)		
	No	12(48%)	17(68%)	4.167	0.244 (NS)
Menopausal status	Pre	13(52%)	16(64%)		
	Post	12(48%)	9(36%)	4.478	0.214 (NS)
Breast feeding	Yes	19(76%)	14(56%)		
	No	6(24%)	11(44%)	2.242	0.524 (NS)

As regards site of tumor, 72% of BC group had unilateral tumor and only 28% of BC group had bilateral tumor.

There were only 3 cases (12%) of BC group had metastases. There was non-significant difference between BC and controls as regards CBC (WBCs, HB, PLTs) when compared to controls.

There was high significant difference (p value<0.001) between groups as regards ESR as 100% of BC group had high ESR and none of control group had high ESR.

There was non-significant difference between BC and controls as regards liver function tests which include alanine aminotransferase (ALT), aspartate aminotransferase (AST), total protein, albumin, total bilirubin (TBIL), direct bilirubin (Direct BIL) and alkaline phosphatase (ALP) when compared to controls. On the other hand, there was high significant increase in urea in BC group when compared to controls (p value<0.001), also there was significant increase in creatinine in BC group when compared to relatives and controls (p value = 0.02).

### Specific investigations.

#### I. CA 15-3

There was high significant increase in CA 15-3 in BC group when compared to controls (p value<0.001) (Table 2).

Table 2. CA 15-3 of the studied groups.

	BC group Mean ± SD	Control group Mean ± SD	ANOVA	P value
CA 15-3 (U/ml)	201.08±131.6	12.08±2.87	33.807*	<0.001 (HS)

## II. BRCA1 gene (185delAG mutation)

There was only (1 case/ 4%) in BC group had heterozygous BRCA1 gene (185delAG mutation), this mean that total prevalence of BRCA1 gene (185delAG mutation) in BC was 4% (Table 3).

Table 3. BRCA1 gene (185delAG mutation) in the studied groups

		Group		Total
		BC	Control	
Negative (not present)	NO.of Cases	24	25	96
	% within BRCA1	25.0%	26.0%	100%
	% within group	96.0%	100.0%	96.0%
Heterozygous 185delAG mutation	NO.of Cases	1	0	3
	% within BRCA1	33.3%	0.0%	100%
	% within group	4.0%	0.0%	3.0%
Homozygous 185delAG mutation	NO.of Cases	0	0	1
	% within BRCA1	0.0%	0.0%	100%
	% within group	0.0%	0.0%	1.0%
Total	NO.of Cases	25	25	100
	% within BRCA1	25.0%	25.0%	100%
	% within group	100.0%	100.0%	100%

Chi square = 5.573, P value =0.637 (NS)