

(61 true-negative and 2 false positive) with diagnostic accuracy of 96.8% (62 of 64).

The overall diagnostic accuracy of the procedure was 95% (116 of 126), sensitivity 93%, and

specificity 97.5%. Table (1) shows the final pathological diagnoses and results of FNAC.

Table 1. Final pathological diagnoses and results of Fine Needle Aspiration Cytology

Final pathological Diagnosis		No.	Accurate diagnosis by FNAC	
			No.	Diagnostic accuracy
Malignant lesions	Invasive ductal carcinoma	50	48	93%
	Invasive lobular carcinoma	6	4	
	Ductal carcinoma in situ	2	2	
Benign lesions	Fibroadenoma	34	34	96.8%
	Fibrocystic disease	20	18	
	Duct ectasia	6	6	
	Fat necrosis	4	4	
Total		126	116	91%

The breast masses (both benign and malignant) were more common in the upper outer quadrant of the breast, followed by upper inner quadrant,

lower outer quadrant, central peri-areolar region lastly lower inner quadrant as shown in table 2.

Table 2. The distribution of lump in relation to quadrant of the breast

Site	Benign		Malignant		Total	
	No.	%	No.	%	No.	%
Upper outer	34	53.4%	32	55.2%	66	54%
Upper inner	16	25%	10	17.3%	26	21.3%
Lower outer	8	2.5%	8	13.8%	16	13.1%
Central	2	3.2%	6	10.3%	8	6.6%
Lower inner	4	6.2%	2	3.4%	6	5%

The mean age of patients with malignant masses was 45.5 ± 0.8 years (mean \pm SD) compared with 36.4 ± 0.2 years in those with benign masses ($P < 0.01$)

The peak incidence of malignant conditions was in the 6th decade of life, while the peak incidence of benign conditions was in the 3rd decade as shown in table 3.

Table 3. The distribution of benign and malignant lesions of the breast in relation to age groups

Age (years)	Benign		Malignant	
	No.	%	No.	%
10-19	4	6.3	-	-
20-29	34	53.1	-	-
30-39	14	21.8	6	10.3
40-49	8	12.5	16	27.6
50-59	4	6.3	34	58.6
60-69	-	-	2	3.4