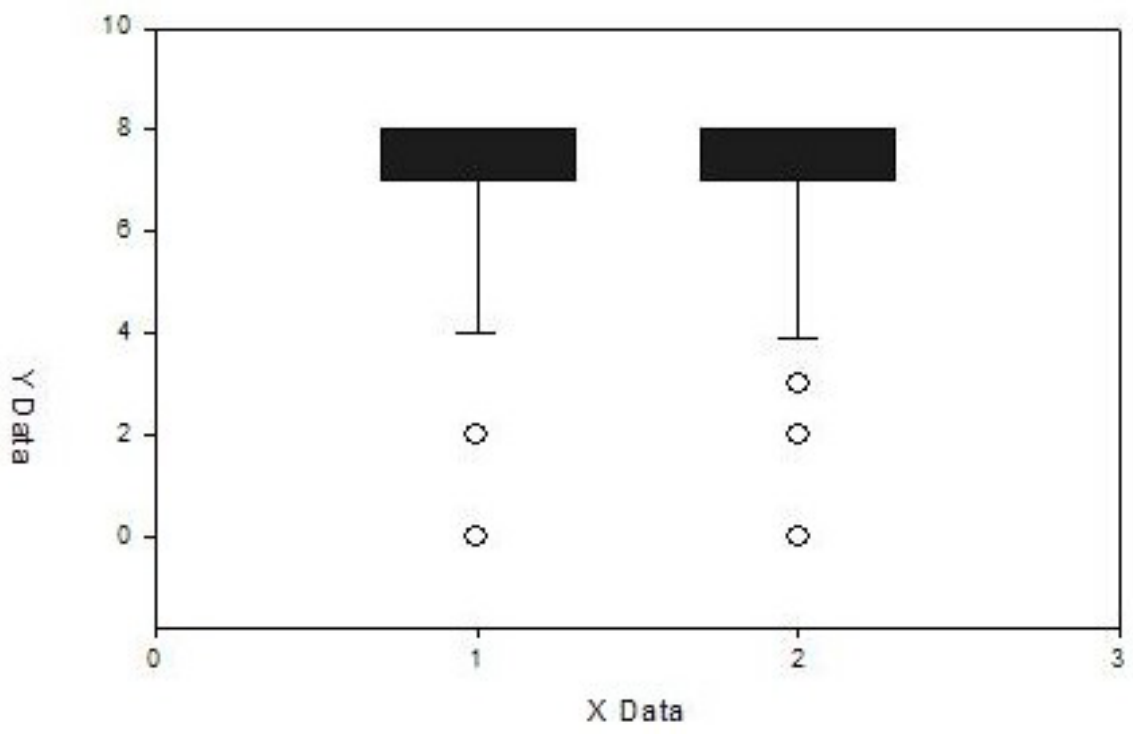

Figure 1
Graphic Results, 1: ER in CNB, 2: ER in surgical excision.

Traditionally, the hormone receptor status was determined by enzyme immunoassay of ER and PgR proteins. However, this has been replaced gradually by immunohistochemistry (IHC), which has shown an equal reliability [6].

Previous studies that examined the reliability of preoperative CNB using enzyme immunoassay showed conflicting results [7-9].

This retrospective study examines the correlation between CNB and surgical excision in regards to the ER ad PgR status of invasive breast cancer using IHC.

Patients and Methods

In this retrospective study we looked at consecutive 95 cases of invasive breast carcinoma in 93 patients. All patients underwent CNB at their clinic appointment and proceeded for breast surgery subsequently 2–3 weeks later. Preoperative CNBs and surgical excision specimens were analysed for ER and PgR status using IHC (DAKO mab) after antigen retrieval at high temperature. All specimens were analysed using semi quantitative IHC "quick score" system (0 – 8) by the same breast pathologist. With this method, the intensity of the immunohistochemical reaction as viewed under the light microscope was recorded 0–4 (0 indicated no staining of any nuclei even at high magnification). The proportion of cells staining positively at any intensity was scored as 0 (no cell staining), 1 (1–25% cells stained), 2 (26–50% cells stained), 3 (51–75% cells stained) or 4 (when >75% cells stained). The proportion and intensity scores were added together to obtain a total score ranging from 0 to 8.

We also examined other parameters including: tumour size, grade, and patient's age.

ER/PgR status was considered positive if quick score was 2 – 8. Results were re-assessed when quick score was raised to 4 – 8 to label ER/PgR status as positive. The number of biopsies taken on each occasion was also recorded.

Results

The mean and median age of this study group was 59.2 and 59 respectively (range 32 – 92 years). The mean tumour size was 20 mm (3.2 – 110 mm), and the median