BACKGROUND:

Patients are advised to report any breast associated symptoms during their screening mammograms in the Warwickshire, Solihull and Coventry Breast Screening Service (based at UHWC NHS trust) in keeping with national guidance. One of the criteria to recall clients for assessment in the NHSBSP guidance is when “significant breast symptoms or signs identified at screening”. So far, we have not find any published data on the outcomes of clients in the UK who have been assessed based on the above criteria and we presume that the NHSBSP guidance is based only on expert opinion(s). However, there is only study reporting outcomes in such clients from USA. Screening with recommendations in the guidelines the local breast screening unit has written protocols which stipulate as to which clients should be recalled for further assessment. These include complaint of lump, distortion/change in shape of breast, recent nipple discharge, eczema, or recent inversion, skin tethering and dimpling and these clients are routinely recalled for further assessment at our unit.

This study was aimed at finding out the number of cancers in this cohort of patients and to provide some evidence on the outcomes of assessing clients conforming to the above guidance.

METHODS

In this retrospective study, we investigated the types of symptoms reported and subsequent clinical, imaging and histology findings for clients recalled over 4 years between 2011 and 2015. Data was collected from NBSS and hospital RIS, PACS and CRIS. A total of 709 clients were recalled for further assessments who had reported symptoms outlined above. Client age range was 47 to 77 years and mean age was 56 years.

RESULTS

Assessment outcomes are shown in figure 1. A total of 15 clients had cancer diagnosed out of 709 that were recalled. Of these 6 clients (figure 2) had their cancer at the site of their complaint whilst remainder had their cancers incidentally picked up remote from the site of the cancer in the ipsilateral breast (3 cases) or in the contralateral breast (2 cases) during assessment. 3 other cancers were diagnosed as screening mammographer noticed dimpling in the breast and these three cases were discarded from further analysis. Therefore, overall 12 out of 706 clients (1.67%) reporting breast symptoms had cancer but the rate of cancers diagnosed to be concordant with patients symptoms was (0.85%). There was one case of high grade DCIS only whilst remaining cases were invasive tumours (3 x ductal/NST and 2 x ILC) in the 6 concordant cases (shown in the images below). None of the 6 cancers were evident on original screening mammograms (even in retrospect review by a NHS BSP breast screening consultant radiologist (with 7 years of screen film reading experience) even when knowing where the tumour was. There were no interval cancer in this group.

DISCUSSION

As far as we know there is no reported outcomes on clients reporting symptoms/signs in breast who have been subsequently assessed in the NHSBSP. The NHSBSP guidance on recalling such clients do not allude to any reference and therefore we presume that the guidance in the above regard is an “expert opinion” and partly based on the symptomatic guidelines. Of course the purpose of any cancer screening programme is to detect cancers while maintaining relatively good specificity. In our study the overall cancer detection rate in patients reporting symptoms is 1.67% and cancer that was concordant with client reported symptoms was even less at 0.85%. This is far less than reported in the previous study which reports this figure as 0.9% for in situ and 4.3% for invasive tumours. Therefore, a significant proportion of clients did not have a cancer. It is unclear whether all women who have breast symptoms/signs always report such symptoms during screening mammography which may further dilute the malignancy detection rate. Currently, all resources including monetary costs for screening recalled clients are provided by the NHSBSP. The average cost per recalled client in the West Midlands is £175 which includes further imaging (mammograms and US) as well as clinical examination. An additional national tariff of £330 per client is levied if a stereo core or US guided core biopsy is undertaken (this cost also covers remuneration for pathology and discussion at MDM). Of course the costs including litigations costs for missing cancer may outweigh the above figure. Therefore, a robust alternative mechanism for assessing ladies who report signs/symptoms but do not show any mammographic abnormality ought to be sort. In this regard reminding clients that mammographic screening is not a perfect test and clients who report breast signs/symptoms should be advised (including a written letter) to see their own general practitioner at the earliest. This should be documented in the NBSS. We accept that this will be a controversial issue.

CONCLUSION

The current study, as far as we know, is the only published study interrogating the outcomes of assessment of clients who reported signs/symptoms pertaining to breast at the time of their NHSBSP screening mammogram and shows that the cancer detection rate in this cohort is very low. The study provides some evidence which perhaps should be used to modify current NHS BSP assessment guidance.

REFERENCES

