



## Managing the 2-week wait for breast patients

RISHI SINGHAL, RAVI MARUDANAYAGAM, B BALASUBRAMANIAN, IS PATERSON

Breast Unit, Heart of England NHS Foundation Trust, Birmingham, UK

### ABSTRACT

**INTRODUCTION** Published data suggest that the 2-week wait system and triple assessment at one fast-track clinic visit is an out-dated method of capturing disease from a referral population. These studies report up to 32% of breast cancer coming from routine referrals. It has been recommended, therefore, that all breast referrals should be seen within 2 weeks. The sheer volume of referrals are likely to prevent this target being achieved. The aim of this study was to analyse the performance of our fast-track system.

**PATIENTS AND METHODS** The Birmingham Heartlands and Solihull fast-track clinics were set up in 1999 with a prospective audit system. The data from this audit were retrospectively analysed and cross-referenced with the cancer data base to determine the referral origin of breast cancers from November 1999 to February 2005.

**RESULTS** A total of 14,303 (fast-track,  $n = 6678$ ; routine referral,  $n = 7625$ ) patients were seen over a 5-year period. Overall, 1095 cancers (91.8% of the total) came from the fast-track clinics which had a pick-up rate of 16.4% compared with 98 cancers (8.2% of the total) and a pick-up rate of 1.3% for routine referrals ( $P < 0.001$ ). The appropriateness of fast-track referral was also analysed which showed that 14.4% of cancers were detected if the referral criteria were met compared to 0.55% if they were inappropriate ( $P < 0.001$ ).

**CONCLUSIONS** The traditional fast-track, triple assessment breast clinic is an efficient and well-structured way of diagnosing disease. We recommend that the two system referral pattern should continue.

### KEYWORDS

Breast cancer – 2-week wait – Fast-track

### CORRESPONDENCE TO

Rishi Singhal, 26 Lloyd Square, 16 Niall Close, Edgbaston, Birmingham B15 3LX, UK  
E: singhal\_rishi@rediffmail.com

The 2-week wait for breast cancer was introduced by the UK Government on 1 April 1999.<sup>1</sup> This initiative was recognised in the *NHS Cancer Plan* and further targets were subsequently incorporated.<sup>2</sup>

Ever since the inception of 2-week wait, numerous studies have been conducted looking at various aspects of this service.<sup>3–14</sup> Published data suggest that the 2-week wait system and triple assessment at one fast-track clinic visit is an out-dated method of identifying disease in a referral population. These studies report up to 32% of the breast cancer coming from routine referrals.<sup>11</sup> It has been concluded, therefore, that all patients should be seen within 2 weeks by 2008.<sup>15</sup>

### Patients and Methods

The Birmingham Heartlands and Solihull fast-track clinics were set up in 1999 with a prospective audit system. The data collected in this audit included mode of referral (*i.e.* routine versus fast-track) and adherence to the referral

criteria (appropriateness). These data were retrospectively analysed and cross-referenced with the cancer data base to obtain the final diagnosis (*i.e.* cancer versus non-cancer).

Referral criteria for the fast-track breast clinics are available to general practitioners (GPs) referring breast patients to our hospital. The appropriateness of the referral was adjudged by the examining clinician in view of the referral criteria.

Data were collected from November 1999 to February 2005. Statistical analysis was performed using the chi-squared test and significance accepted if  $P < 0.05$ .

### Results

A total of 14,303 patients were seen over this period. Out of these, 46.7% ( $n = 6678$ ) of the referrals originated from fast-track and the remainder 53.3% ( $n = 7625$ ) came via routine referrals.

The median age for referrals was 48 years and 40 years for fast-track and routine referrals, respectively.

A total of 1195 breast cancers were detected during this period with 1095 (91.8% of the total) from fast-track clinics and 98 (8.2% of the total) from routine referrals.

As a proportion of the total number of cases seen via each mode of referral, 16.4% of the patients seen in the fast-track clinic were detected with breast cancer compared to only 1.3% from routine referrals ( $P < 0.001$ ).

The appropriateness data were available on 3178 patients with 2280 (71.7%) meeting the referral criteria. Further analysis showed that 14.4% of the appropriate referrals were cancers compared to only 0.55% of the inappropriate referrals ( $P < 0.001$ ).

## Discussion

Introduction of the maximum 2-week wait for breast cancer referral in 1999 has been heralded as a great success. Anxious patients get their diagnosis quicker. GPs have a rapid referral route and a series of referral guidelines. Hospitals have been able to concentrate their diagnostic resources for breast cancer into identified triple assessment clinics. All the published evidence suggests that these clinics are very effective in identifying patients with breast cancer and our study, the largest of its kind from the UK, would support that conclusion.

More recently, concern has been expressed on the number of breast cancers which came through the routine referral route. Indeed, some studies have suggested that almost a third of cancers in a referral population have not come through the rapid referral service.<sup>11</sup> This has led to the logical conclusion that all patients should be seen within the 2-week standard.<sup>15</sup> The aims of the study were to determine what percentage of our catchment population were diagnosed outside the 2-week referral route and to determine whether we needed to find the resources to see all of our patients within a 2-week time frame.

The results show that 8.2% of the cancers were not referred through the fast-track system; however, on analysing those patients in detail, several important facts emerge.

Of the total cancers detected via routine referrals, 5% fit criteria for urgent 2-week wait referral. So, in effect, they should have been fast-track patients if the referring GP had stuck rigidly to the referral criteria. Further, 1.1% of the patients actually had impalpable cancers diagnosed on routinely arranged imaging when the patients presented with unrelated symptoms and had no abnormal clinical findings. This is in line with published literature, when Marsh *et al.*,<sup>16</sup> in a study of 496 breast patients, had concluded that all patients diagnosed with breast cancer in their routine group were only co-incidental findings. So, most patients who present in this group are those with non-specific complaints and thus difficult to identify. Added together, these two reduce the figure of 8.2% to 2.1%.

Fast-track referral besides providing an urgent referral for patients with suspected breast cancer, also provides an opportunity for anxious patients who might not necessarily have cancer but are worried about having one. In fact, previous studies have reported that delay in breast cancer diagnosis by up to 3 months does not alter prognosis or survival.<sup>17,18</sup> Therefore, although a small proportion of patients have delayed diagnosis (2.1% in our study), they are likely to be patients with subtle signs of cancer and do not face a survival disadvantage.

Furthermore, the 8.2% of cancers that were diagnosed from routine referrals were an average over the length of the study. Analysing this year-on-year, the actual percentage is dropping and this is in line with published data. The accuracy of GP referrals was graded at 71.7%. However, this accuracy has improved over the period of study (69.9% in 2003, 71.1% in 2004 and 72.1% in 2005). A similar phenomenon was noticed by Imkampe *et al.*<sup>11</sup> where the inaccuracy of GP referrals was shown to be improving with time and thus was only a reflection of learning curve problems.

## Conclusions

It is hard to justify the extra resources that would be required to transfer all breast cancer patients to a 2-week wait. The study provides evidence of the success of categorising into urgent and non-urgent cases and provides objective evidence to suggest that the current system of referral can continue.

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