

COMMENTARY

## Commentary on: Incidental Breast Cancers Identified in a One-Stop Symptomatic Breast Clinic

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In a recent study published in the *Journal of Breast Cancer*, Mehrotra et al. [1] reported incidental breast cancers identified in a one-stop symptomatic breast clinic where patients receive the results of their radiological examinations and tissue sampling on the same day. Medical environments differ from country to country and from culture to culture. Nevertheless, breast cancer is the most frequent cancer among women in developed and developing countries [2].

They reported 87.2% symptomatic cancers and 12.8% incidental cancers using a definition of symptomatic cancers as “breast cancers correlated to the patient’s symptoms” and that of incidental cancers as “breast cancers detected only by imaging in a completely separate location to the site of presenting symptoms and not palpable by the clinician.” In this study, the mean age of patients with symptomatic cancers and incidental cancers was 64 and 63 years, respectively. Because a variety of symptoms can be presented, such as pain or hypochondria, it is unclear whether their one-stop symptomatic breast clinic is treating symptomatic patients or being used for screening. How can we clearly separate a symptomatic clinic from a screening clinic? However, the point of this study may not be regarding the one-stop or the symptomatic breast clinic.

According to a recent study from the UK, 80% of breast cancers occur in women aged over 50 years [3]. Based on this, they suggested mammography of both breasts and whole breast ultrasonography of the symptomatic breast to identify incidental breast cancers in a country where the mean age of patients with breast cancer is more than 60 years of age. It is interesting when we consider the most recent data of nationwide Korean patients with breast cancer reported by the Korean Breast Can-

cer Society in 2008. These data were collected from all patients who had been newly diagnosed and registered throughout the year. The report revealed that 82.2% (5,059/6,151) of patients had an initial symptom of a palpable tumor and 17.8% (1,092/6,151) of patients had an initial symptom of a non-palpable tumor, and that the mean age of all patients was 49.8 years. Then, what shall we do for a country in which more than half of patients with breast cancer are younger than 50 years?

Although mammography is an established screening method for breast cancer, and high breast density has been suggested as a risk factor, it has been unclear particularly in young Asian women. In a recent Korean study, 68.8% of women in their 40s and 35.5% of women in their 50s had “heterogeneously dense” or “extremely dense” breasts, respectively [4]. This is not much different from a previous study of 823 asymptomatic Korean women that showed that the frequency of a dense mammogram was 88.1% in 30-34 year old, 91.1% in 35-39 year old, 78.3% in 40-44 year old, 61.1% in 45-49 year old, 30.1% in 50-54 year old, 21.1% in 55-59 year old and 7.0% in 60-64 year old women. They also pointed out that 47.2% of 40-44 year old, 44.8% of 45-49 year old and 44.4% of 50-54 year old Western women, which is very different breast density [5]. Because of the high probability of dense breasts, it seems that ultrasonography should be the major imaging modality for very young Korean women. Recently, a Korean study of 811 young women under the age of 30 indicated that the incidence of BI-RADS categories 3, 4, and 5 were 49.2%, 16.5%, and 0.6%, respectively. For the symptomatic patients, the cancer rates for categories 3, 4, and 5 were 0.3%, 6.3%, and 100%, and for the asymptomatic group, the cancer rates were 0%, 8.7%, and 100%, respectively [6]. However, breast screening ultrasonography is still not considered the standard examination. In Japan, the peak incidence of breast cancer occurs in women in their late 40s, as in Korea. According to a Japanese study of nearly 50,000 cases, 7.5-MHz screening ultrasonography failed to show that breast ultrasonography as a screening tool reduces mortality from breast cancer [7].

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It is clear that using breast screening ultrasonography can be helpful for patients with dense breasts, but it is controversial. Its feasibility is dependent on the personnel performing the exam and machine quality [8,9]. Another consideration is cost. In Korea, the medical insurance run by the government does not reimburse for breast ultrasonography, so patients pay, and the cost varies according to the performer, machine, and the hospital level in the referral system. We will have a better overview soon, as a large-scaled randomized control trial is currently ongoing in Japan to compare mammography alone with mammography combined with ultrasonography at 2-year intervals to investigate which is more useful to decrease breast cancer mortality [7].

It is common for Asian women to have small dense breasts. Caution should be taken when performing ultrasonography for a non-palpable lesion, as non-palpable breast cancers may have different ultrasound characteristics [10]. Currently, it may be recommended to perform breast screening ultrasonography for selected patients, particularly for the young Korean women with dense or symptomatic breasts.

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