

# Breast Cancer Screening: No more excuses

With incidence rates climbing dramatically, young Indian women can no longer ignore the necessity for annual breast checkup; especially when the screening process starts with a completely touch-less and radiation-free exam that is effective, culturally acceptable and pocket friendly; all at once. There are no more excuses...

by HEAL India Bureau

ens of millions of women in the western countries annually receive a mammogram when there is no symptom of breast cancer; with knowledge that it (mammography) may not be perfect but early detection is the only hope. In contrast, Indian women do not step forward for this screening procedure because common thinking is that "why should I get checked when there is no apparent problem, especially when it is uncomfortable!" Also, there is anxiety and fear of being positively diagnosed. Counter to common thinking, breast cancer is in fact a younger woman's disease, it is more prevalent in urban than rural parts and the rates are dramatically rising, faster than any other female cancer.

### Drawbacks of mammography

Accuracy of mammography is age dependent and can miss as many as 55% of tumors in women younger than 50 years of age (DMIST Study, USA). Now consider the fact that 87% of India is younger than 50 years of age and that most common age of a breast cancer patient at diagnosis is 43-47 years. Due to the fear of lifetime overexposure, women under the age of 40 are not recommended to get annual screening mammograms.

Mammography requires compression of the breasts causing pain/discomfort and high deterrence

towards regular annual screening in culturally-modest Indian women. Moreover, Indian medical imaging fraternity is limited to 7,000 radiologists as compared to USA's 27,000 serving a population 1/3rd the size. Lack of skill & experience of the radiologists can directly impact the efficacy of mammography to detect early cancers.

#### **Breast Cancer in India**

- Breast cancer has practically replaced cancer of the cervix as the leading site of cancer in all urban cancer registries.
- Average age of the patient at the time of diagnosis is between 43 to 47 years, a staggering 10 years younger than compared to western countries.
- As of today, 1 in every 22 women in India in their lifetime is expected to be diagnosed with breast cancer.
- More than 92% of breast cancers are diagnosed at stage II or later.
- 1 out of every 2 women diagnosed with breast cancer does not survive the disease; mostly due to late stage diagnosis.



### Here comes the good news!!

Harnessing the clinical know-how and expertise of leading breast surgeons, gynecologists and university professors UE LifeSciences Inc. has designed a fully computerized, software driven digital thermal imaging technique that is capable of finding signs of developing breast cancer without requiring the slightest touch to the body or even radiation. The invention is simply called NoTouch BreastScan.

"This technology is specifically designed to provide effective screening among young women. It does not make use of X-rays, which has difficulty penetrating through dense breasts to identify camouflaged tumors; instead we analyze heat patterns generated by areas of high vascularity and biological processes like angiogenesis", says Mihir Shah, the founder of UE LifeSciences and the inventor of NoTouch BreastScan technology.

## How does this touch-less & radiation-free technology work?

NoTouch BreastScan incorporates military-grade multiple Infra Red cameras to acquire high resolution heat map data of the breasts. A proprietary software algorithm performs pixel level analysis and interpretation to automatically create the final report.

This technology has the power to observe the onset of breast cancer without waiting for anatomical features such as tumor or lumps. This allows for the physicians to effectively monitor specific areas aggressively from very early stages. This technique can be very helpful for high-risk women or women with dense breasts for whom doctors would like to limit the mammographic radiation exposure and yet find breast cancers early.

#### Now in India...

India will have to customize the solution with tools that are in sync with its cultural beliefs and scalable with the present healthcare infrastructure. NoTouch BreastScan has been introduced in India at Ahmedabad based Apollo Hospital's breast clinic. Over 150 women walked in for screening over a short span of two months!

According to a study by International Agency for Research on Cancer (IARC) a branch of WHO, there will be approximately 250,000 new cases of breast cancer in India by 2015. In 2008, Dr. Umberto Veronesi, the father of modern breast cancer surgery addressed the Indian Breast Cancer Initiative in Delhi stating that breast cancer will become an epidemic in India in another 10 years. "The first priority in the campaign against breast cancer in India is early detection, which is fundamental. It makes the difference between life and death," Veronesi said in an interview.

