Study Shows Skin Marker Type Critical in Showing Tissue Detail

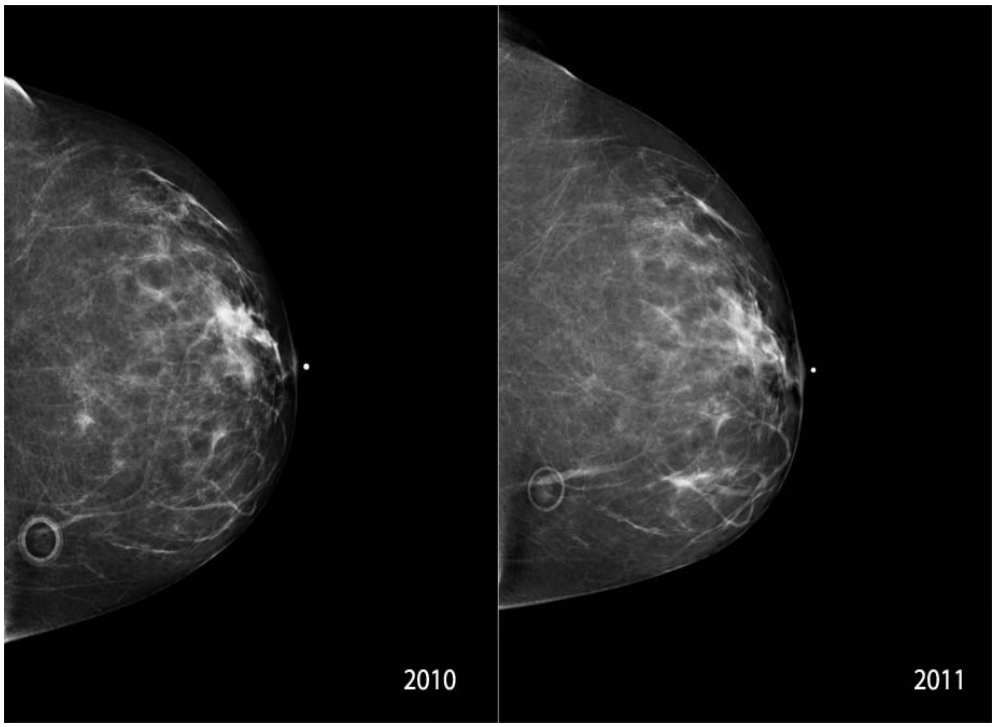
Radiologist uncertainty of findings on screening mammograms leads to 5-15% of patients requiring additional testing at a cost of $1.6 billion annually[1], with the majority of these tests turning out normal.

In addition to cost, extra tests and false positives can slow patient throughput, impact staff productivity and cause deep anxiety and unnecessary extra exposure to radiation to the patient.

Mammographic skin markers have proven helpful to radiologists in identifying common areas of interest which could otherwise result in false positives, false negatives, additional workups and tests.

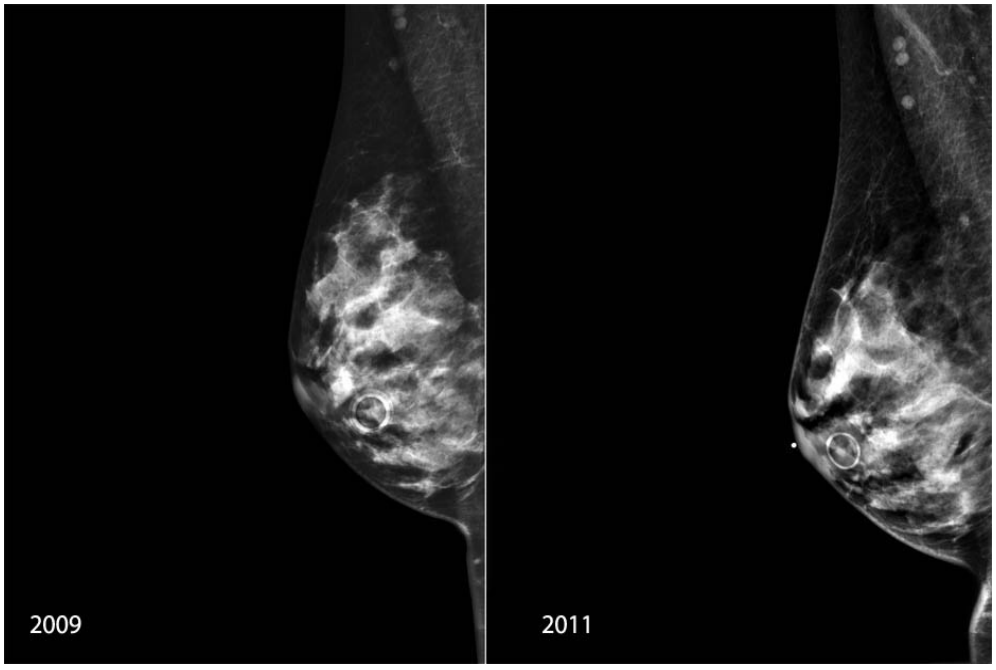
Because the earliest signs of breast cancer can be the appearance of micro-calcifications, it is imperative that the benefits of skin markers are not outweighed by any possible obscuring of tissue detail which could lead to a missed cancer and a far worse outcome for the patient.

Patient A – 2010 **Patient A – 2011**



A 41 year old woman presented in 2010 and 2011 for her routine screening mammogram. A raised mole on her breast was marked both years but using different style skin markers.
Shown above are her 2010 and 2011 CC images.

Patient B – 2009 **Patient B – 2011**



A 49 year old woman presented in December 2009 and January 2011 for her routine screening mammogram. A raised mole on her breast was marked both years but using different style skin markers.
Shown above are her 2009 and 2011 MLO images.

Methodology

26 Radiologists were provided same view images from two patients' consecutive annual mammograms.

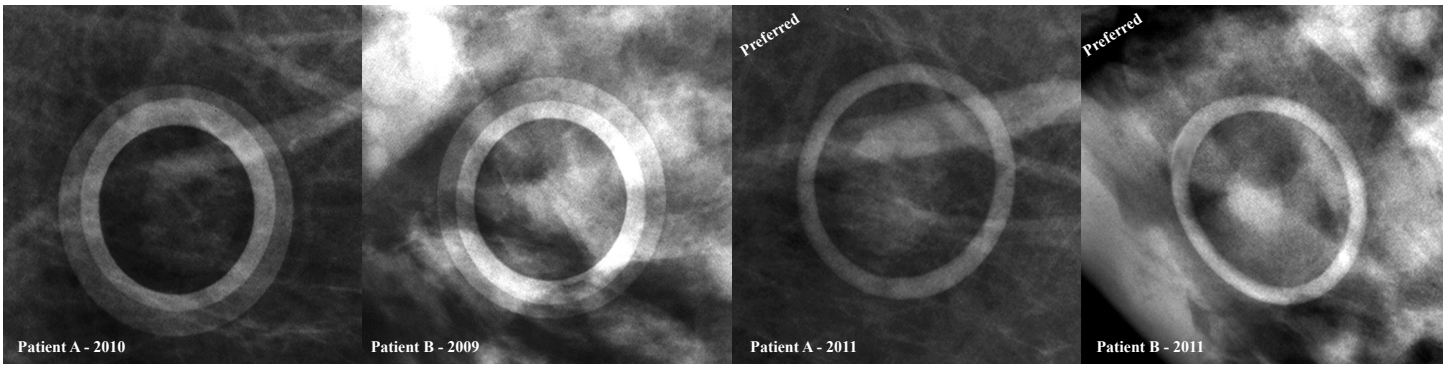
Both 2011 mammograms were conducted with a 1mm uniform density mole marker (Designed for Digital® O-SPOT® REF 791, Beekley Medical®). The prior year's mammograms were conducted with another brand's 3mm dual density mole marker.

Neither brand was identified in the images provided.

The radiologists were then asked which marker's image they preferred and why[2].

see results on side two

Results



Magnified view of 3mm Dual Density marker page 1.

Magnified view of 1mm Uniform Density marker page 1.

24 radiologists preferred the 2011 image on Patient A; one preferred 2010 image of Patient A; one expressed no preference.

24 radiologists preferred the 2011 image on Patient B; 2 expressed no preference.

Radiologist Comments:

3mm Dual Density Marker	1mm Uniform Density Marker
"The double ring is unnecessary and could potentially obscure an underlying lesion."	"The tissue underlying the marker is much clearer and easier to evaluate."
"The marker in 2010 is too distracting."	"I can see through it better and it covers less of the adjacent tissue."
"I don't need the rings of Saturn to know there's a mole present"	"I can better see the mole. The marker doesn't appear as thick."
"Obstructs viewing some tissue."	"Less obstructive, more subtle. Does not take your eyes away from your main job."
	"Thinner and obscures less tissue."

References

1 Aabha Rathee "False breast cancer diagnosis reduced when doctors read more mammograms" March 1, 2011

2 Peter Papadopoulos, Sr. Research Consultant, "Patient Comparison Survey – Annuals"

Manufactured by Beekley Corporation
One Prestige Lane, Bristol, CT 06010 USA Tel: 1.800.233.5539 or +1.860.583.4700 Fax: 1.800.735.1234 beekley.com

REV: MAM_WP-SMT_0720