

(craniocaudal view)

가
가
: 1997 6 7 20

가
가
(paired t-test).

가
12.9 ± 1.7cm 14.5 ± 1.4cm
(p<0.001).

가

(mediolateral oblique view)

가 (1,2). (cran-
iocaudal view) ()

(3). (Fig.1). 1997 6 7
20

가 가 가 가 가

paired t - test (Fig.2).

가
), $14.5 \pm 1.4\text{cm}$
 가
 $12.9 \pm 1.7\text{cm}$ (\pm

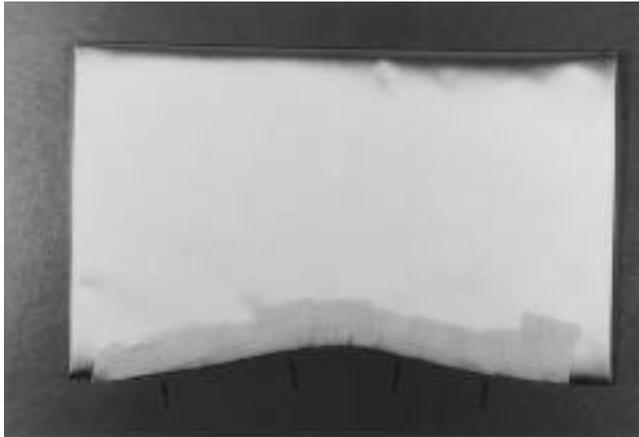
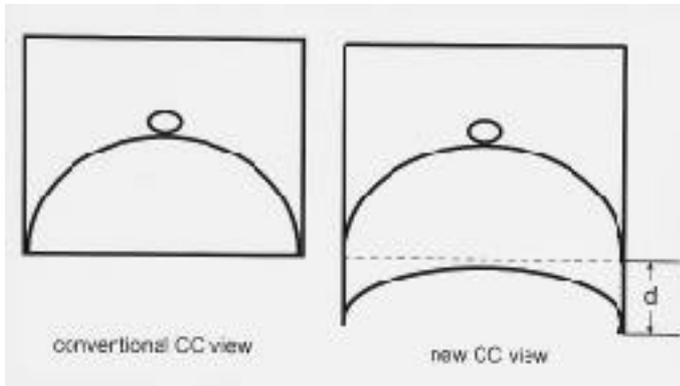
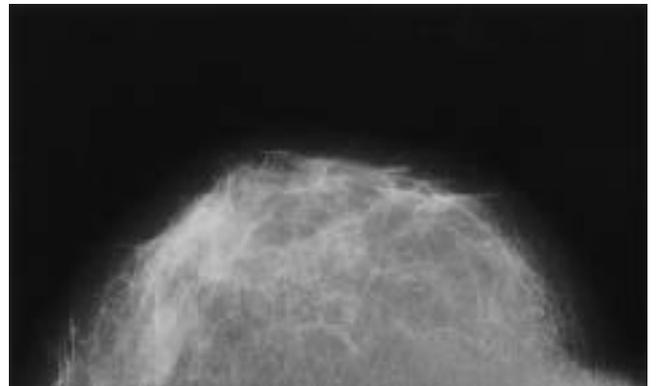


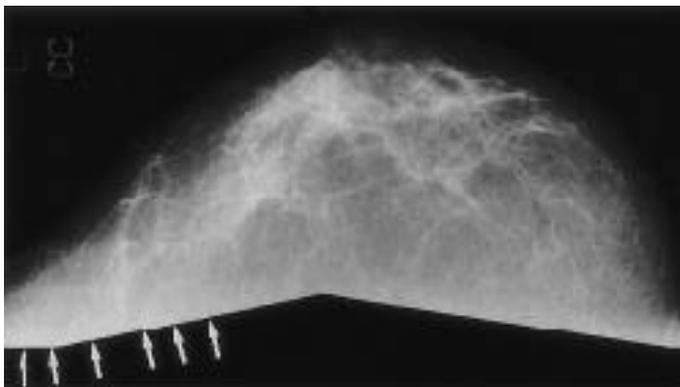
Fig. 1. Newly devised film and film cassette. The film and film cassette was made manually. The contact plane (arrows) between this apparatus and the thoracic wall is concave formed.



A



B1



B2

Fig. 2. A. A diagram of new CC view shows wider field of view indicated as ' d ' than the conventional CC view, especially in the lateral aspects of the breast. B1,2. Comparison of demonstrable breast tissue on conventional(B1) and newly devised CC view(B2).

1. Bassett LW, Gold RH. Breast radiology using the oblique projection. *Radiology* 1983; 149: 585-587
2. Lundgren B, Jakobsson S. Single view mammography: a simple and efficient approach to breast cancer screening. *Cancer* 1976; 38: 1124-1129
3. Sickles EA, Weber WN, Galvin HB, Ominsky SH. Baseline screening mammography: one vs. two views. *AJR* 1986; 147: 1149-1153
4. Kopans DB. *Breast imaging*. Philadelphia: J.B. Lippincott, 1989: 43-45
5. Kopans DB. *Breast imaging*. Philadelphia: J.B. Lippincott, 1989: 46-50

New Film-Cassette System to Obtain Wider Field of Craniocaudal View Compared with Conventional Technique in Screening Mammography¹

Nam Hyeon Kim, M.D., Seung Mun Jung, M.D., Dae Sik Ryu, M.D., Man Soo Park, M.D.

¹*Department of Radiology, Kang Nung Hospital, Medical College of Ulsan University*

Purpose : To evaluate the efficacy of a newly designed cassette and film system used to obtain a craniocaudal (CC) image during mammographic examination.

Materials and Methods : We designed a film-cassette system for use in obtaining a CC image. The merit of this system is that the contact plane between the film and film cassette and the thoracic wall of the examinee changed from linear to concave, thus including more tissue on the image. Twenty women examined by screening mammography underwent conventional and new CC plane examinations. The distance from the nipple to the posterior margin of the included breast tissue, as seen on CC mammograms, was measured using the two techniques, and the difference between the respective results was analyzed by paired t-test.

Results : The distance from the nipple to the posterior margin was 12.9 ± 1.7 cm and 14.5 ± 1.4 cm at the lateral portion of the conventional and new CC image, respectively. This distance was thus significantly greater on the new than on the conventional image ($p < 0.001$), but there was no significant difference between their medial portions.

Conclusion : The newly designed cassette and film system used to obtain a craniocaudal image during mammography includes more breast tissue than the conventional system and may be helpful for the mammographic screening and diagnosis of peripheral breast lesions.

Index words : Breast radiography, technology

Address reprint requests to : Nam Hyeon Kim, M.D., Department of Radiology, Kang Nung Hospital
#415, Bang Dong-Ri, Sacheon-Myeon, Kang Nung-Si, Kang Won-Do, 210-850, Korea.
Tel. 82-391-610-3484 Fax. 82-391-610-3010