The establishment of Digital Image Capture System(DICS) using conventional simulator

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Purpose: The simulator is used to determine patient field and ensure the treatment field ,which encompasses the required anatomy during patient normal movement such as during breathing.

The latest simulator provide real time display of still, flouroscopic and digitalized image, but conventional simulator is not yet.

The purpose of this study is to introduce digital image capture system(DICS) using conventional simulator and clinical case using digital captured still and flouroscopic image.

Methods and materials: We connect the video signal cable to the video terminal in the back up of simulator monitor, and connect the video jack to the A/D converter. After connection between the converter jack and computer, We can acquire still image and record flouroscopic image with operating image capture program.

The data created with this system can be used in patient treatment, and modified for verification by using image processing software. (i.e. photoshop, paintshop)

Result: DICS was able to establish easy and economical procedure. DCIS image was helpful for simulation. DICS imaging was powerful tool in the evaluation of the department specific patient positioning.

Conclusion: Because the commercialized simulator based of digital capture is very expensive, it is not easily to establish DICS simulator in the most hospital. DICS using conventional simulator enable to utilize the practical use of image equal to high cost digitalized simulator and to research many clinical cases in case of using other software program.