

Object shape dependency of in-plane resolution for iterative reconstruction of computed tomography

著者	高田 忠徳
著者別表示	Takata Tadanori
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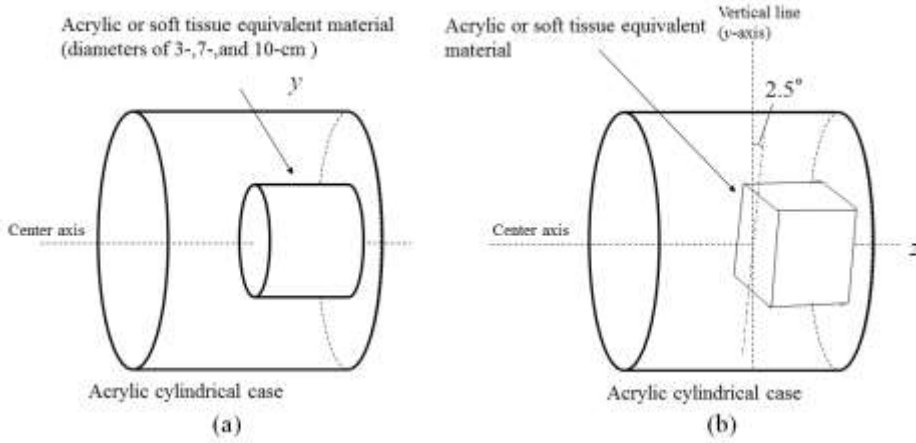


Fig. 1 Phantom overviews. (a) Columnar and (b) cubic objects were enclosed in a 200-mm-diameter acrylic cylindrical case filled with water. For each object shape, two objects made of acrylic or a soft tissue-equivalent material were prepared.

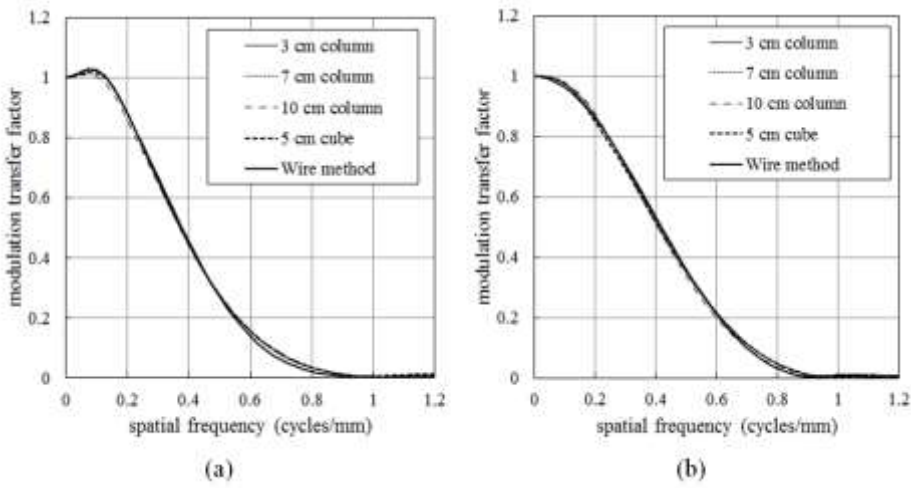


Fig. 2 MTF result of a wire phantom and MTF_{Task} results for acrylic objects with different shapes obtained using FBP with (a) SOMATOM DF and (b) CT750 HD at 10 mGy.

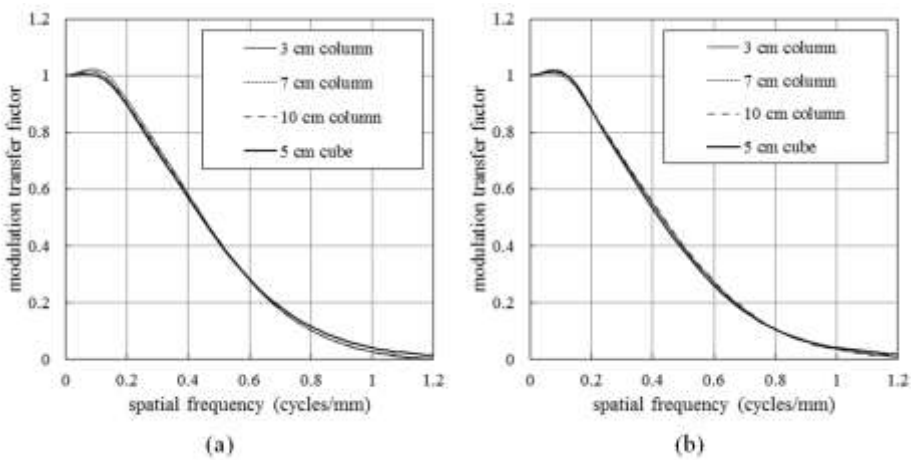


Fig. 3 MTF_{Task} results of SAFIRE images for acrylic objects obtained at (a) 10 and (b) 5 mGy.

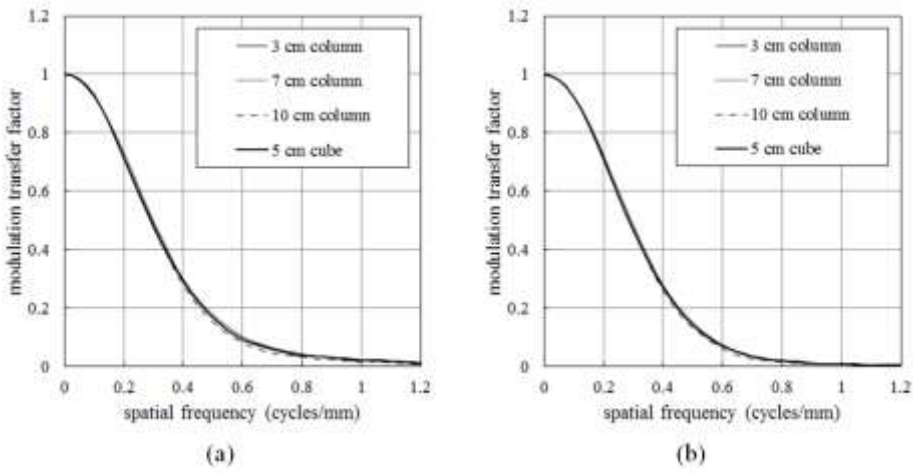


Fig. 4
 MTF_{Task} results of ASIR images for acrylic objects obtained at (a) 10 and (b) 5 mGy.

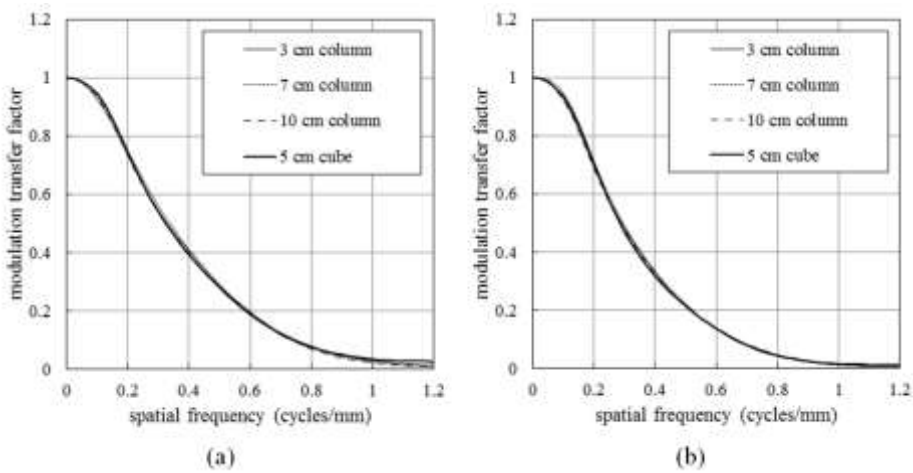


Fig. 5
 MTF_{Task} results of SAFIRE images for objects made of a soft-tissue-equivalent material obtained at (a) 10 and (b) 5 mGy.

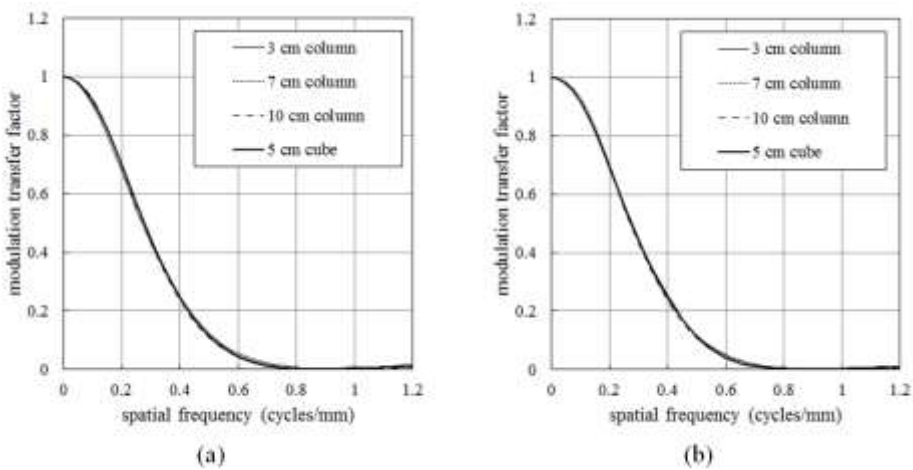


Fig. 6
 MTF_{Task} results of ASIR images for objects made of a soft-tissue-equivalent material obtained at (a) 10 and (b) 5 mGy.

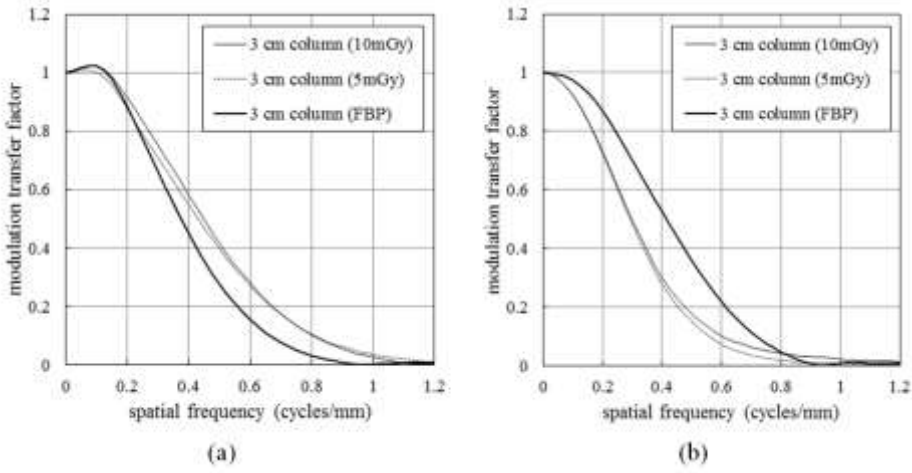


Fig. 7
 MTF_{Task} results of IR images with different doses for acrylic object and of FBP images. (a) SAFIRE and (b) ASIR.

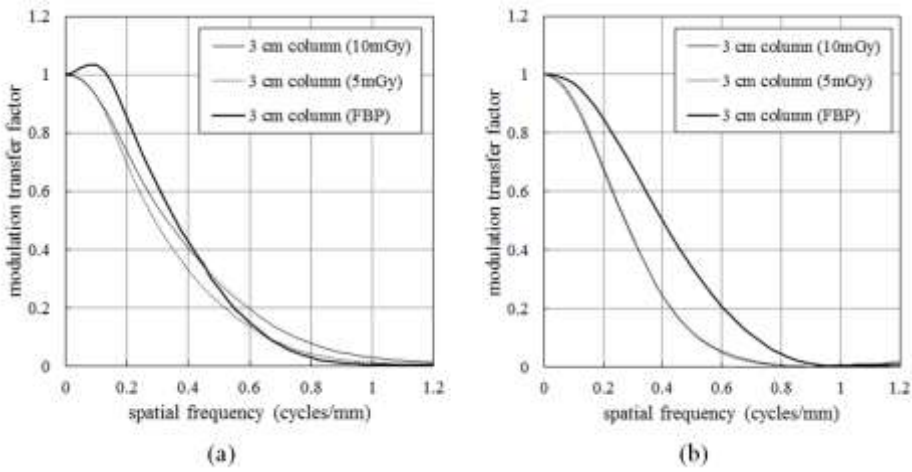


Fig. 8
 MTF_{Task} results of IR images with different doses for objects made of a soft tissue-equivalent material and of FBP images. (a) SAFIRE and (b) ASIR.