

Summary

Contrast Enhancement for Sentinel Lymph Node Imaging

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The paper proposes a new contrast enhancement method for sentinel lymph node imaging. The sentinel lymph node image acquired by a conventional gamma camera system has a wide dynamic range, so that the contrast of sentinel lymph nodes relatively decreases. The proposed method, which is named an annular background subtraction (ABS) method, first found the center of the distribution of activity. Then we calcu-

lated the mean value in each annular area centered at the injection point of radiopharmaceuticals with one pixel width. The original image was subtracted by the mean value at each annular area. The performance of the proposed method was confirmed by clinical data.

Key words: Image processing, Sentinel lymph node, Annular background subtraction, Contrast enhancement.