

Visualization of nasopharyngeal carcinoma with Tl-201 chloride and a three-head rotating gamma camera SPECT system

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Tl-201 SPECT was performed on 12 patients with Nasopharyngeal carcinoma (NPC) by means of a three-head rotating gamma camera to evaluate whether or not Tl-201 SPECT was useful and reliable for assessing the tumor viability of NPC. Tl-201 clearly accumulated in the tumor in 3 patients before radiation treatment and increased Tl-201 uptake by the lesion ceased after the treatment. Three of 9 patients who were followed up after radiotherapy developed apparent local recurrence and Tl-201 SPECT clearly visualized these recurrent lesions. Tl-201 SPECT was very useful for assessing the tumor response to irradiation and for detecting local recurrent tumor. A High resolution SPECT system employing Tl-201 chloride is a new reliable and accurate diagnostic tool for the assessment of NPC.

Key words: nasopharyngeal carcinoma, Tl-201 chloride, SPECT