

The radiostrontium scan detected some abnormality in 50% of patients who were suspected of having bone metastases but radio-

graphs were either normal or equivocal. In some cases, the scan showed greater involvement than was apparent on the X-ray.

Application of ^{87m}Sr Bone Scintiscanning to Oral Region

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We have performed bone scintiscanning of the oral region with ^{87m}Sr which can be administered high activity dose (Millicurie amount) and used repeatedly because of its physical properties, that is, a shorter half life (2.8 hours) and a lower energy γ -emitter (390KeV) than ^{85}Sr used until now.

Scintiscanning was begun 30min. after intravenous injection of 1 ~ 3mCi ^{87m}Sr . ^{87m}Sr as well as ^{85}Sr was concentrated into both the osteolytic due to bone invasion of oral cancer and osteoplastic site where facial fracture was healing, especially in lytic cases before bony destructions were found on the

roentgenograms, the changes were demonstrated on the scintigrams.

On the other hand, ^{87m}Sr was also accumulated in nasal cavity, maxillary sinus and cervical vertebra. These accumulations may have the possibility of an interrupted factor against correct diagnosis. For this reason, ^{87m}Sr -internal distributions were also studied on.

Therefore ^{87m}Sr bone scintiscanning may be useful to detect not only early hidden bone invasion of soft part tumor on the roentgenogram, but facial fracture zones etc..