

X. Tumors

Gallium 67 Citrate Scanning of Tumors in Head and Neck

H. WATANABE, T. NISHIO, Y. YAMAGISHI and T. SAITOH

Department of Radiology, Nippon Medical School, Tokyo

In ^{67}Ga -citrate scanning, it is important to appreciate its normal distribution previously. We had an attempt to obtain normal scintigram of head and neck. 20 cases free of lesions in the head and neck were scanned and radiographic examination were performed simultaneously.

We devided radiograms of head and neck into 15 divisions symmetrically in frontal view and 10 in lateral view. Grade of trapping of the ^{67}Ga in the each division was studied on scintigrams. Consequently a large amount of uptake was shown symmetrically in the region of orbits, nose, mouth and mandibula (probably salivary glands). Lacrimal glands might take part in some uptakes in the region of orbits. Because on counting of tear its CPM at 48 hours after injection of ^{67}Ga -citrate is more than twice number of control. In the neck, an amount of uptake is visualized in the region of cervical vertebrae and in anterior portion of neck.

Up to the present, we have had 37 cases of ^{67}Ga -citrate scanning of tumors in head and neck.

Result as follows:

	cases	++	+	±	-
Ca. of tongue (squamous cell Ca.)	3	0	1	1	1
Ca. of pharynx (squamous cell Ca.)	5	1	2	0	2

Ca. of larynx (squamous cell Ca.)	4	0	2	0	2
Ca. of maxilla (squamous cell Ca.)	2	0	2	0	0
Ca. of auditory tube	2	0	1	1	0
Sarcoma of maxilla	2	1	0	1	0
Lymphosarcoma of tonsil	2	1	1	0	0
Malignant lymphoma of cervical nodes	7	3	2	1	1
Cervical metastasis (Ca. of esophagus)	3	1	1	1	0
Cervical metastasis (Ca. of pharynx)	1	1	0	0	0
Cervical metastasis (Ca. of breast)	1	0	1	0	0
Cervical metastasis (Ca. of lung)	1	0	0	1	0
Cervical metastasis (Ca. of thymus)	1	0	0	0	1
Metastasis of parietal bone (Ca. of breast)	1	0	0	0	1
Mixed tumor of parotis	1	0	0	0	1
Struma nodosa cystica	1	0	0	0	1
Total	37	8	13	5	9

^{67}Ga -scanning in the head and neck is effective on the diagnosis of the tumor especially in determination of area and progress of radiotherapy in the cases who have positive trapping of the R.I.