of $^{201}$TI-chloride and scintiscans were made for 5 min after injection. The apparatus used was a Nuclear Chicago's Pho-gamma HP and the count was 200K.

Result: (1) In normal cases $^{201}$TI was seen incorporated into the nasal cavity, nasopharynx, oral cavity, salivary gland, and thyroid gland.
(2) Among the 11 cases of cephalocervical malignant tumors, 7 cases, including cancer of the upper jaw, maxillary papillon, cancer of the tonsil, and cancer of the larynx, gave positive reactions to the scanning test. In these 7 cases a scanning test with $^{57}$Co-BLM was also positive.

The advantages of the use of $^{201}$TI-chloride are as follows:
(1) $^{201}$TI-chloride does not accumulate in borne.
(2) Scanning can be started 5 min after injection and the result can be obtained in several tens of minutes. $^{201}$TI-chloride is considered to be a nuclide applicable to malignant tumors in the cephalocervical part.

Clinical Evaluation of Tomor Scintigraphy with $^{201}$TI-Chloride

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Thallium-201 chloride scintigraphy was evaluated in 63 patients with various diseases in the chest region. (Primary lung cancer: 47 cases, malignant lymphoma: 5 cases, tuberculosis: 2 cases, other benign diseases: 9 cases).

Scintigraphy was performed 15~30 minutes after intravenous injection of 2 mCi of $^{201}$TI-chloride with a Nuclear Chicago scinticamera model Pho/Gamma III and minicomputer system.

Scintigrams obtained were classified as: (++) marked accumulation of $^{201}$TI-chloride in the tumor, clearly revealing its contours, (+) slight ~ moderate, (−) negative. The following results were obtained;
1. A high positive rate was shown in cases of primary lung cancer and malignant lymphoma:
   primary lung cancer: (++) 35/47 (74.5%), (+)
   malignant lymphoma: (++) 4/5, (+) 1/5, total positive rate 5/5 (100%).
2. A significant difference in positive rate was not in fact discerned with relation to pathohistological type of primary lung cancer.
3. In the case of primary lung cancer with atelectasis and/or pleural effusion, the accumulation of $^{201}$TI-chloride was only in the focal lesion. The invasion to the mediastinum and hilums by primary lung cancer and malignant lymphoma was often easily detected.
4. In the cases of benign diseases, all of them were negative.
5. None of the 63 cases scintiscanned with $^{201}$TI-chloride manifested side effects.

$^{201}$TI-Chloride Scan for Various Uterine Tumor

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Up to date, no established simple and invasive radioisotopic procedure is reported for the detection of the uterine tumors, $^{201}$TI-chloride, widely used for the myocardial imaging, was applied or patients with various uterine tumors. Two mCi of $^{201}$TI-chloride was injected intravenously in