

$^{201}\text{Tl}$ -CHLORIDE SCAN FOR UTERINE TUMOR AND ITS INCORPORATION MECHANISM USING RI MINI-COMPUTOR  
C. Tobari\*, H. Kurosawa\*, K. Muroi\*, H. Watanabe\*,  
S. Noguchi\*, M. Iio\*\*, K. Matsui\*\*, M. Hosoba\*\*\* and  
K. Kinoshita\*\*\*

\* Div. of Clin. RI Center, Toho University.

\*\* Div. of Nucl. Med. and Radiol. Scie., Toho Univ.

\*\*\* Shimazu Co. Ltd.

We have already introduced that  $^{201}\text{Tl}$ -chloride was very usefulness for various uterine tumor. We presented in this time that  $^{201}\text{Tl}$ -Cl for uterus was evaluated on limitation of these tumor size after surgery, comparative study in the pathologic result and incorporation mechanism by RI mini-computer system.

Patient including 43 of myoma and 42 of malignant tumor were intravenously injected 2 mCi of  $^{201}\text{Tl}$ -Cl using  $\gamma$ -camera covering high resolution collimator on lined RI mini-computer (Shimazu scinti-pac 1200).

As these results,  $^{201}\text{Tl}$ -Cl scan for uterine tumor was very suitable and ideal technique with almost absolute accuracy if over 5 cm of the size of lesion. In the pathological result, adenomyosis and adenocarcinoma as growing adrenal tissue were delineatedly found out. The mechanism of the incorporated uterus of  $^{201}\text{Tl}$  was probably caused by  $\text{K}^+$  analogy because it was the positive result by  $^{201}\text{Tl}$  but false negative result by  $^{99\text{m}}\text{Tc}$ -HSA to the lesion introducing the functional image analysed RI mini-computer system.

We convinced that  $^{201}\text{Tl}$  scan for uterine tumor was very suitable agent and safety external method.

CLINICAL APPRAISAL OF VARIOUS BODY IMAGING IN UTERINE TUMOR, COMPARATIVE STUDY ESPECIALLY BETWEEN CT AND RI

C. Tobari\*, M. Iio\*, T. Higuchi\*, H. Yamada\*,  
K. Chiba\*, M. Murata\*, S. Kawaguchi\*, H. Kurosawa\*\*,  
K. Muroi\*\*, T. Ohmura\*\*, H. Watanabe\*\* and  
S. Noguchi\*\*

\* Div. of Nucl. Med. and Radiol. Scien.

\*\* Div. of Clin. RI Center

This presentation was comparatively studied on various uterine tumor using body CT scan (GE, CT/T),  $^{201}\text{Tl}$ -chloride scan by  $\gamma$ -camera, angiography by the method of Serzinger and ultrasound method by B-scope.

In the body CT scan, the uterus was very clear delineated from the other organs as lied in lower pelvic cavity and good enhancement and could be also done its qualitative diagnosis.

In the  $^{201}\text{Tl}$ -Cl scan, the positive image was sufficiently obtained on differential diagnosis of uterine tumor. In addition, renal scan and renogram was also useful to evaluate supporting diagnosis for affected function of urinary tract.

In the angiogram, the character of uterine tumor could be noted but this method was invasive method.

In the ultrasound method, the character of uterine tumor was not so suitable study except cystic lesion, but its merit was very low radiation dose to patient.

These studies should be applied following the character of suspecting uterine tumor.