ing a land mark on the symphysis pubis.

Recently, we performed rapid placental imaging prior to static imaging. The early and greater appearance of radioactivity in the placenta, compared to the uterine wall, can be helpful to determine the placental site.

One of patients we studied in the supine position experienced hypotensive episode, but was easily cured by turning lateral position. No untoward reaction of agent were observed.

With $^{99m}$Tc-albumin, urinary excretion into bladder interferes the image of placenta previa. With $^{113m}$In-chloride, lesser fetal absorption dose than $^{99m}$Tc-albumin and no necessity of pre-medication are advantages, nevertheless suboptimal energy for $\gamma$-camera.

### Comparison of $\alpha$-Fetoprotein Values in Patients with Testicular Tumor by Radioimmunoassay and Hemoagglutinate Reaction

M. UEDA, A. KIDO, M. MIKI, T. MACHIDA

Department of Urology, Jikei University, School of Medicine, Tokyo

Measurement of $\alpha$-fetoprotein (AFP) in patients with testicular tumor is valuable in differentiating embryonal carcinoma from testicular disease. AFP in human serum was measured by radioimmunoassay (RIA) and with a hemoagglutinate reaction (HAR) kit. AFP in 20 out of 40 patients with testicular tumor was measured simultaneously by RIA and HAR 60 times using the same serum.

Histopathological patterns of the testes were classified into 5 groups (Dixon and Moor's classification). AFP values above 20 ng/ml were determined as abnormal by RIA. AFP values below 100 ng/ml cannot be detected by HAR. Materials which proved abnormal by HAR were measured 25 times by RAI for comparison.

**Result:** Abnormal AFP values were observed in 3 out of 3 cases in Group II (carcinoma, pure or with seminoma), 2 out of 2 cases in Group IV (teratoma, with either embryonal carcinoma, chorio carcinoma, or both, and with or without seminoma) and 1 out of 2 cases in Group V (chorio carcinoma, pure or with either seminoma or embryonal carcinoma, or both). AFP values over 100 ng/ml measured by RIA showed good correlations with those by HAR.

**Conclusion:** HAR technique is easy, but the reaction has a slightly low sensitivity. On the other hand, RIA features a high sensitivity. AFP measurement by RIA for patients with testicular tumor is more effective than that by HAR in early diagnosis and follow up.