The solution mixtures were incubated along with standard preparations at 4° C for 18 hours, and 500 μ l of a dextrancoated charcoal solution was added and incubated for further 30 min. After centrifugation at 3000 rpm for 15 min, 0.8 ml of the supernatant was pipetted into a liquid scintil-

lation vial and counted.

The sensitivity of the method was sufficient enough to detect as little as 40 pg/ml or 4 ng/dl of serum samples. Accuracy, precision and specificity of the method were discussed and some clinical data are also presented.

A Compositive Luteinizing Hormone Releasing Hormone (LH-RH) Loading Test on Male Sterility

M. Shirai and M. Nakamura

Department of Urology, Department of Radiology

K. Yonezawa

Hospital Pharmacy

Tohoku University, School of Medicine, Sendai

Plasma FSH, LH and testosterone were measured by radioimmunoassay technique in 15 cases with sterility and 5 normal males following intramuscular injection of compositive LH-releasing hormone (0.1 mg).

In almost all cases with sterility, increment of plasma FSH and LH values following LH-RH administration was seen. However, the reaction of pituitary to LH-Rh administration occured a little slower in a group of azoopsermia than the controls, while it seemed quite normal in a group of oligosperia.

On the other hand, the increase of plasma testosterone was lower than normal in patients with sterility following LH-RH loading test.

As mentioned above, the pituitary reacted to LH-RH in male sterility, but LH-RH loading test resulted in scarcely any increase of plasma testosterone. These facts suggest that the interstitial cells themselves are not functioning normally in male sterility. The obtained results also show that LH-RH loading test is a far more surpassing method for examination with respect to its capability of diagnosis for the both conditions of pituitary and gonad at the same time, besides shortening the time for test, comparing with the conventional HCG test or the rapid HCG test recently applied.