

招請講演抄錄

Introduction of Various Kinds of Radioimmunoassay Kit

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These years a rapid and marked progress has been observed in the nuclear medicines and radiopharmaceuticals. These radiopharmaceuticals can be divided into the two, in vivo and in vitro according to the way of using.

In the in vivo method, recently the demand for Tc-99m and its compounds has so much increased that it will be seemingly much more than that of I-131 and its compounds in near future. On the other hand, in the in vitro test, for thyroid gland function test, T-3 test and Res-O-Mat ETR test (effective thyroxine test) in which both T-3 and T-4 tests can be performed at one time have been widely used so far and just recently a strong attention has been paid for RIA as the newest method for in vitro test.

RIA is the method of measuring the hormone of very small quantity in the blood by using both immune reaction and radioisotope. This measuring method was originated by Berson

and Yalow in 1960 who succeeded in measuring Insulin concentration in the blood by using RIA, and it is characterized by much better sensitivity than that of and other methods so far performed.

At present the study of RIA is being developed rapidly and widely and the measurement of every sort of hormone is becoming possible by the RIA, and at the same time the kits for measuring various kinds of hormone has been developed and sold commercially. Moreover measuring not only the hormone but also the concentration of poly-peptide and medicine in the blood is becoming possible by RIA.

As for the various RIA kits now sold, various devices are made to simplify the handling procedures (especially the isolating method of B and F), and those kits have their own merits respectively. In this presentation, putting the focus on the isolating method of B and F, I speak on the RIA kits presently sold commercially and how to use of them.

Diagnostic Accuracy of Liver Scintigraphy

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