

**Clinical Significance of the Serum IRI Pattern on the Follow-up GTT  
for Long-term Control of Diabetes Mellitus**

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In the previous report, we emphasized clinical significance of pattern-recognition of the serum IRI response following the GTT in diabetes mellitus not only for diagnosis but also for long-term follow-up.

This report deals with further extended study on clinical evaluation of changes of the serum IRI pattern following the follow-up GTT at least more than six months after the initiation of the therapy of the diabetics.

Sixty diabetic patients receiving diet therapy with or without oral anti-hyperglycemic agents at our institute were surveyed. The control of abnormal carbohydrate metabolism was carried out with the use of the practical parameter "Blood Sugar on Visit". The serum IRI response following the oral 100g GTT was measured and analyzed before and after the treatment. The serum IRI was measured by two-antibody-method by the use of the Dainabot-Insulin-Kit.

In the obese group, a marked decrease in

height of response of HYPER pattern was observed exclusively in those which an adequate weight reduction was obtained. On the contrary, those who did not show any significant change in the serum IRI pattern seen as in DELAY and LOW patterns revealed difficulty of some extent in clinical management of the diabetic condition.

In the non-obese group, the initial LOW pattern was divided into two types; one changed into the DELAY pattern by increasing the height of response, and the other remained as LOW. The latter type mostly required medications of large dose and of stronger potency for the control of hyperglycemia which was rather difficult to attain.

It is concluded that a recognition of the follow-up IRI response following the GTT during the course of treatment in addition to the one at the initial visit provides us more valuable information for the accomplishment of well-oriented long-term follow-up of the diabetics.