

Osaka Against Cancer Association. These women were stratified with their menopausal age, and divided into three groups, i.e. rapid menopause (under 45), normal menopause (45-49) and delayed menopause (50-54). Morbidity prevalence rate of women who had at least one of the six perimenopausal symptoms (hot flush, perspiration, chill sensation, shortness of breath, palpitation and vaginal dryness accompanied by coital pain) which were assessed to be primarily dependent upon estrogen withdrawal and mean number of the above symptoms per woman were statistically analysed in each menopausal age group. Both prevalence rate and mean number of symptoms were significantly greater in rapid menopausal group than in normal and delayed menopausal group. Also the mean number of symptoms per morbid woman was significantly greater in rapid menopausal group than in other two groups. These results can support the hypothesis that the degree of climacteric symptoms experienced by women correlated to speed of estrogen loss consequent upon the ovarian aging.

147. Meaning Prolactin in Reproductive Physiology Especially Concerning Comparative Study of Microadenoma

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1. We were experienced with 62 cases GAS (galactorrhea amenorrhea syndrome), therefore mainly we were analysed the case of PRL-producing microadenoma.

2. There were the useful endocrinological diagnosis of organic GAS.

- (1) The case of serum prolactin levels over 200 ng/ml
- (2) The case of serum estradiol levels under 50 pg/ml
- (3) The case of no response type in TRH-test (PRL), especially the case of max/base under 50%.

3. There were the correlation between the size of

PRL-producing pituitary adenoma in classification of Hardy and serum PRL levels.

4. In the histology of pituitary adenoma, chromophobe adenoma was occupied 47.7%, and there were the 3 cases abnormal hyperprolactinemia (PRL 1000 ng/ml) in chromophobe-adenoma.

5. serum PRL levels of GAS on an early stage of pregnancy were higher than normal pregnancy. Pregnant progress of GAS were relative good. There were not anomaly of baby. The changes of sellar turcica by CT-scan and polytomography were not seen compare puerpera with pregnancy.

6. Neurosurgical therapy and taking CB-154 were useful treatment of GAS.

148. A Study of Size Heterogeneity of Prolactin in Normoprolactinemia

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The size heterogeneity of human normoprolactinemia was investigated with the use of lyophilization. Serum samples were obtained from women at the follicular, periovulatory and luteal phases and from patients with normoprolactinemic 1st grade amenorrhea receiving CB-154. Each specimen was fractionated by gel filtration and the effluent fractions collected in tubes were lyophilized and radioimmunoassayed for PRL, with the results as follows. (1) As for size heterogeneity of the hormone, three peaks of radioimmunoassayable activity, designated respectively as "big-big", "big" and "little", were demonstrated. (2) Little PRL accounted for 56 to 80% of total assayable activity in women at prefollicular phase of a normal menstrual cycle, for 62 to 85% at periovulatory phase and for 59 to 79% at luteal phase; the percent little PRL activity varied with the stage in the menstrual cycle as well as among individuals. (3) In normoprolactinemic 1st grade amenorrhea, serum little PRL showed lower values (30-40%) than those of normal menstrual cycle women at any stages.

The data have suggested that not only the problems of immunologically measured serum PRL levels but the qualitative problem also bear relations to the effect of this hormone on the endocrinological environment.