

EFFECT OF ALCOHOL ON NICOTINE-STIMULATED RELEASE OF OXYTOCIN IN HUMAN

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Plasma oxytocin before and after smoking were measured by radioimmunoassay on samples taken from 14 volunteers, 2 females and 12 males, 20~42 years of age. Each subjects were abstained from smoking and drinking for at least 10 hours prior to the test. Nine of them were given 100 ml of whisky over 20 minutes from 45 to 25 minutes before smoking. Two pieces of nonfilter cigarette were given within 10 minutes to 9 subjects with ethanol and 5 subjects without ethanol. Blood was collected at 15-minute-intervals over 45 minutes after the smoking. The smoking increased plasma oxytocin level from 2.6 ± 1.3 pg/ml to 9.5 ± 6.7 pg/ml significantly in 5 subjects ($p < 0.02$). The increase in plasma oxytocin level with smoking was suppressed from 3.0 ± 1.7 pg/ml to 3.3 ± 2.5 pg/ml in 8 of 9 subjects with ethanol, but stimulated from 1.8 pg/ml to 25.8 pg/ml in only 1 subject with side-effect of reching during smoking.

The study shows that nicotine is a potent stimulator for oxytocin, and pretreatment with ethanol eliminate the response of oxytocin to nicotine. Oxytocin could be released by reching and vomiting after smoking as similar as vasopressin secretion from the posterior pituitary.

FUNDAMENTAL STUDIES OF HUMAN PARATHYROID HORMONE (PTH) IN SERUM

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Human Parathyroid Hormone(PTH) measurement is one of important laboratory tests for hypoparathyroidism. A sensitive radioimmunoassay for PTH has been Unusually difficult to develop for several reasons. However, a new PTH Kit(EIKEN ICL) which can measure circulating PTH leves in normal individuals becomes available.

Intraassay reproducibility was satisfactory; CV were 7.4% resrectively. PTH was detected in 54 sera from normal adults and ranged between 0.1 and 0.7ng/ml. Levels in sera from patients unith secondary hypoparathyroidism were markedly elevated, ranging between 2.0 and 7.8ng/ml.

Them it was concluded that EIKEN PTH RIA Kit was one of the most suitable method for the determination of human prathyroid hormone in clinical samples.