C V 6

THYROTROPIN RELEASING HORMONE (TRE) IN RAT AND AMPHIBIAN BRAIN

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Immunoreactive TRH has been measured in methanolic extracts of rat brain. Rat brain was dissected into five parts. TRH content was 3.4 ± 0.2. ng in the hypothalamus, 6.1 ± 0.4. ng int the thalamus, 3.4 ± 0.2 ng in the brain stem, 4.9 ± 0.2 ng in the cerebral cortex and 0.3 ± 0.02 ng in the cerebellum. TRH concentration was 255 ± 20, 43 ± 3, 12 ± 0.53, ± 0.17 and 1.2 ± 0.06 pg/mg respectively. TRH has the same cherical and immunological properties and the same biological activity. Synthetic TRH was degraded in vitro by brain tissus. Cerebral cortex degraded TRH more than thalamus and hypothalamus did ; cerebellum and brain stem were less active. In amphibians, TRH concentration in the brain was equal or two times less than in the hypothalamus. In these species, TRH did not seem to release TSH.

It is concluded that :
- significant quantities of TRH are present in the extra-hypothalamic regions of the brain.
- the capacity of TRH to release TSH in mammals in a newly acquired property
- TRH in the brain has functions other then pituitary release.

C E 50

ANALGESIA INDUCED BY ELECTRICAL STIMULATION OF THE DORSAL RAPHE NUCLEUS (DRN) IN THE CAT

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In chronically implanted cats stimulations applied in the vicinity of DRN induced a powerful analgesia to periphally applied noxious stimuli. During stimulations in most animals analgesia was not accompanied by other obvious behavioral deficits.

In acute experiments the stimulations of the same area and of adjacent structures strongly inhibit the responses of lamina V cells of the spinal cord dorsal horn to peripheral noxious stimulations. However only the inhibitory effects obtained by DRN stimulations are depressed by LSD which is known to supress the spontaneous activity of DRN cells.

Since lamina V cells are implicated in the transmission of painful massages these results suggest that this analgesia could be in part explained by descending inhibitory effects which seem to be dependant of serotoninergic mechanisms.

C J 1

GENETIC ANALYSES OF OPIATE SENSITIVITY, TOLERANCE AND DEPENDENCE IN THE MOUSE.

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The use of diallel crosses and of a new genetic device, the recombinant inbred strains, has permitted to arrive at a genetic model for the effects of morphine and heroin on spontaneous activity (running fit) and analgesia. The results indicate that the motor and analgesic effects of opiates are two distinct phenomena and that the same neuronal and biochemical model cannot explain them. The findings are discussed in relation to the brain regional biochemical differences evident in these strains.

C E 29

UNE ETUDE PHARMACO-CLINIQUE DU TRAITEMENT PAR L'IMIPRAMINE.

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Une étude pharmaco-clinique de l'imipramine a été réalisée sur un groupe de 24 malades hospitalisés pour dépression et soumis à un traitement standardisé pendant trois semaines.

L'interprétation des données a permis de confirmer l'existence d'une relation entre le taux de desméthylimipramine et l'efficacité clinique pour les seules dépressions endogènes ; l'existence d'une limitation de l'efficacité pour les taux élevés n'a pas été retrouvée.

Les effets dits secondaires, c'est-à-dire considérés habituellement comme dus au traitement se sont révélés pour la majeure partie d'entre eux des symptômes dépressifs. La survenue des effets émergents, comme les réactions cardio-vasculaires, paraissent liées à la nature de la dépression et à des facteurs individuels, bien plus qu'au taux plasmatique de l'antidépresseur.