

EFFET DE L'IMMUNO-NEUTRALISATION DU LH-RH SUR LES TAUX DES GONADOTROPINES ET DE LA PROLACTINE CHEZ LA RATTE CYCLIQUE ET LA RATTE CASTRÉE. — B. KERDELHUE, S. CATIN, M. JUTISZ. *C. N. R. S. (France)*.

Chez la ratte cyclique, l'injection d'un immunsérum (IS) anti-LH-RH a pour effet immédiat d'inhiber presque complètement la sécrétion cyclique de LH mais seulement partiellement celle de FSH, et de diminuer à long terme les taux de base de ces hormones. Elle provoque, d'autre part, à court terme (8 jours), une chute de l'excrétion de la prolactine suivie, à plus long terme, d'une hyperprolactinémie qui persiste même 240 jours après l'injection. Des résultats semblables ont été obtenus à court terme chez la ratte castrée avec cette différence, que l'IS anti-LH-RH a dans ce cas inhibé identiquement l'excrétion des deux gonadotropines.

Dans les deux cas, les concentrations hypophysaires en gonadotropines ou en prolactine ne sont pas modifiées mais le contenu hypothalamique en LH-RH est significativement diminué.

EFFECTS OF SYNTHETIC LH-RH GIVEN BEFORE AND AFTER THE NATURAL PLASMA LH RELEASE AT OESTROUS IN THE SHEEP. — J. P. FOSTER, G. BALL, D. B. CRIGHTON. *University of Nottingham (G. B.)*.

Previous work has suggested a decrease in the sensitivity of the pituitary to LH-RH stimulation following a natural or induced release of LH. To investigate this further, ewes were injected i.v. with 50 µg synthetic LH-RH either before (at onset of oestrus) or after (20 hr after onset of oestrus) the expected time of the natural preovulatory release of LH. The mean area under the LH peaks produced in response to injection was significantly greater in the former case. In the ewes injected at onset of oestrus no release other than that induced by injection was observed during the 25 hr sampling period.

THE EFFECT OF GONADOTROPHIN RELEASING HORMONE (GnRH) ON PLASMA LEVELS OF LUTEINIZING HORMONE (LH) IN LAMBS OF BREEDS WITH HIGH AND LOW OVULATION RATES. — W. R. CARR, R. B. LAND, D. I. SALES. *Edinburgh (Scotland)*.

Finnish Landrace and Blackface lambs of both sexes were treated with GnRH and the amount and nature of the release of LH was examined. A large response was obtained within 15 minutes, followed by a decline which was nearly linear on a logarithmic scale. Two hours after treatment plasma LH levels were still above the initial values. Plasma LH attained higher levels in male lambs than in females, but declined much more rapidly. Plasma LH in the Finnish Landrace rose to higher levels than in the Blackface lambs for both sexes, but the rates of subsequent decline were similar. The significance of this finding and its possible relationship to the high prolificacy of the Finnish Landrace breed will be discussed.