stilboestrol is one of the most potent[8]. Through such an effect stilboestrol may alter the distribution and/or processing of the antigen resulting in a reduced antibody response. This would be in contrast to the adjuvant effect found for a number of other substances which equally cause a marked increase in the phagocytic activity of the reticuloendothelial system[17,18]. If the depressive effect of stilboestrol was due to antigen redistribution it is consistent with this explanation that its effect should be overridden by a larger, presumably saturating, dose of antigen. This and other possibilities for the mechanism of action of oestrogens on the antibody response are being currently investigated.

Résumé. On a étudié l'effet du stilboestrol sur la formation d'anticorps contre de hématies de mouton chez les rats et les souris. Un traitement préliminaire au stilboestrol affaiblissait chez les rats et les souris la réponse exprimée en termes d'anticorps hémolytiques et agglutinants. On a montré que cet effet dépendait de la dose et de la voie d'administration de l'antigène. On discute brièvement les mécanismes susceptibles d'expliquer cette diminution.

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Immunological Evidence for the Homogeneity of an Ovine Pituitary Glycoprotein with Dual Gonadotropic Activity

The isolation, from ovine pituitaries, of a homogeneous glycoprotein exhibiting both FSH[1] and LH activities was reported in a brief communication from this laboratory[2]. This protein (P1–2) was monodisperse when examined by such physico-chemical techniques as ultra-centrifugal analysis, disc electrophoresis and gel electro-focusing. We wish to report briefly immunological evidence in support of the homogeneity of this protein.

Immunization of rabbits was carried out according to the procedure of Moudgal and Li[3], using the crude Koenig-King extract[2] as the antigen[4]. Following periodic bleeding and testing for antibody titre, the antiserum was tested against crude extract, P1–1, as well as P1–2, using the agar gel diffusion method of Ouchterlony and also micro-immuno-electrophoresis[5]. In addition, the antiserum was tested against HCG, PMS, ovine FSH and ovine LH.

The antiserum raised against the crude extract gave precipitin reactions with the crude extract, P1–1, P1–2 and ovine FSH, respectively, but not with HCG or PMS, when tested by the agar gel diffusion method (Figure 2). At least 2 precipitin lines were present in the reactions with the crude extract, as well as with P1–1 and ovine FSH.

[1] The abbreviations used are: FSH, follicle stimulating hormone; LH, luteinizing hormone, HCG, human chorionic gonadotropin; PMS, pregnant mare serum gonadotropin.
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[4] The number of components present in the crude extract and P1–2, as well as in another fraction (P1–1) obtained from the extract, as revealed by disc electrophoresis are illustrated in Figure 1.
[5] J. Clausen, *Immunochemical Techniques for the Identification and Estimation of Macromolecules* (North-Holland Publishing Company, Amsterdam, London 1969), p. 519.

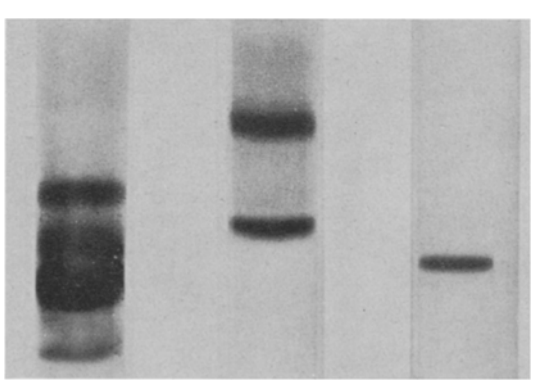

Fig. 1. Acrylamide gel electropherograms of (left to right): crude Koenig-King extract, P1–1 and P1–2, respectively, stained with Amido Black. Length of gels 5.5 cm; pH (*Tris* buffer) 8.6; migration towards bottom (anode).

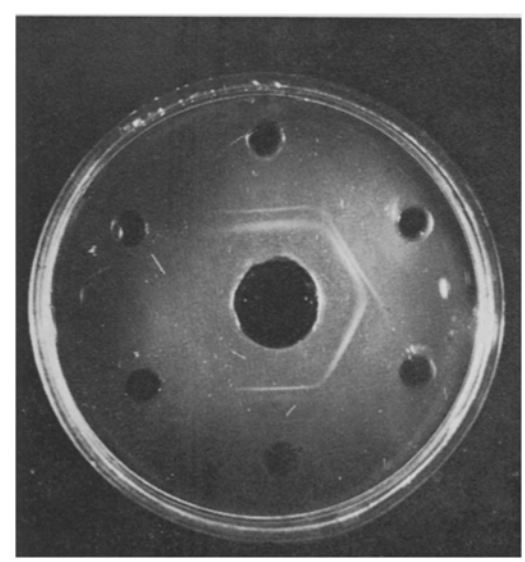

Fig. 2. Ouchterlony diffusion pattern: Antiserum to crude extract in the centre well. Antigens (moving clockwise from the peripheral well at top): Crude extract P1–1, P1–2, ovine FSH (NIH-FSH-S7), HCG and PMS. With ovine FSH, a faint second line was obtained. Note the single line with P1–2.

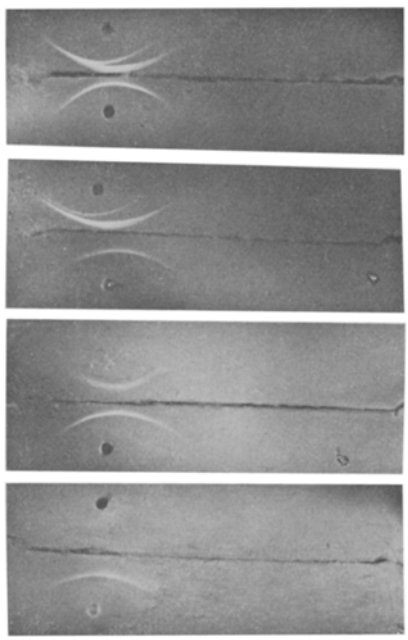

Fig. 3. Micro-immuno-electrophoretic analysis: Antiserum to crude extract (in trough) tested against the following antigens in the upper well (top to bottom): Crude extract, P1–1, ovine FSH (NIH-FSH-S7) and ovine LH (NIH-LH-S5), respectively. In all cases, lower well contained P1–2. Electrophoresis at pH 8.6, at 5 mA/slide for 2 h at room temperature. Migration towards anode (right).

With P1–2, on the other hand, a single sharp line was obtained. Micro-immuno-electrophoresis gave similar results (Figure 3). Multiple precipitin lines were obtained with all the antigens that reacted positively, with the exception of P1–2, which consistently gave only a single precipitin line.

These immunochemical tests, therefore, confirm that P1–2 is homogeneous. It is interesting that in tests for crossreactivity of the antiserum, a positive reaction was obtained with ovine FSH, but not with ovine LH, PMS or HCG. Further investigations are in progress[6].

Résumé. Des tests immunochimiques confirment l'homogénéité de P1–2, une glycoprotéide pituitaire d'origine ovine ayant une activité hormonale double, folliculostimulante et lutéinisante.

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Experimental Allergic Sialoadenitis III. Acute Parotitis Induced by Instillation of Antiserum to Rat Plasma into the Glandular Duct of Rats

Few investigations have been devoted to experimental allergic sialoadenitis[1–5]. We have recently developed a technique for cannulation of the parotid duct of rats enabling the easy introduction of fluids into the gland[6]. Using this technique acute sialoadenitis was induced by immune mechanisms. Challenge of the gland of previously sensitized animals with the homologous antigen resulted in an inflammatory reaction[7]. Intraductal instillation of antiserum to basement membranes caused a necrotizing sialoadenitis and vasculitis[8]. The purpose of this communication is to report on the production of parotitis with antiserum to rat plasma as an extension to our previous studies.

Rabbits were immunized with lyophilized rat blood plasma. 3 injections each of 100 mg of lyophilizate suspended in 2 ml of saline and emulsified in 2 ml of complete Freund's adjuvant were given at weekly intervals. 2 further injections without adjuvant were administered during the 5th and 6th week. Blood was drawn 10 days after the last injection. The antisera gave 5 to 8

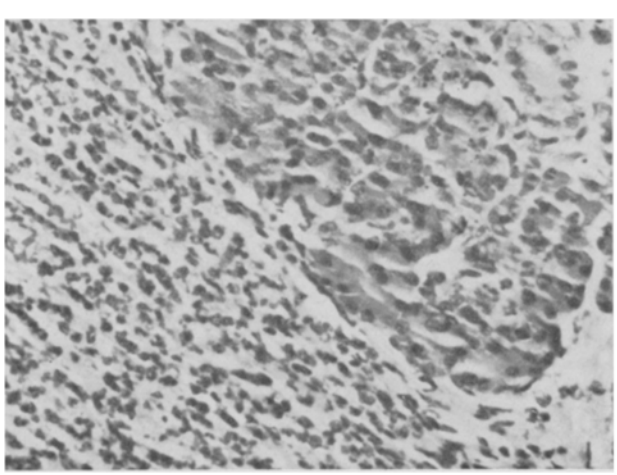

Fig. 1. Severe acute septal and moderate lobular inflammatory infiltration. Hematoxylin and eosin. ×670.

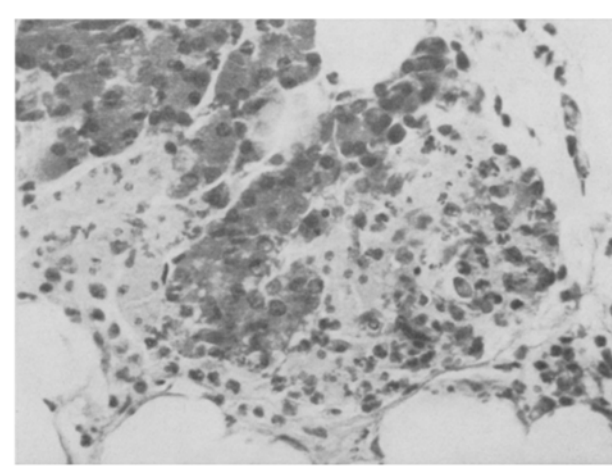

Fig. 2. Focal necrosis of glandular parenchyma and inflammatory response. Hematoxylin and eosin. ×440.