SOME EFFECTS OF CYPROTERONE ACETATE ON EPIDIDYMAL FUNCTION IN RATS. — T. D. GLOVER, D. J. BLACK, J. C. SHENTON, P. BOYD. Université de Liverpool (G. B.).

Cyproterone acetate has been administered subcutaneously to rats at two different dose levels for 3 weeks and 5 weeks respectively. After 3 weeks of treatment at the high dose (20 mg·kg) the rats became infertile and both dose levels of the drug caused significant changes in the chemistry of epididymal plasma. A striking increase in the intertubular tissue of the epididymis was noted but this was not at first associated with infertility or loss of sperm motility. Seminal vesicles regressed rapidly, but levels of testicular androgen and testis weight did not decline until later. It is concluded from the results that the antiandrogenic effect of this drug precedes its progesterogal effect in male rats.


Spermatozoa of many mammals contain acrosin, a trypsin-like proteinase (TLP) which hydrolyses synthetic trypsin substrates such as benzoylarginine ethyl ester (BAEE). This reaction is sensitive to trypsin-inhibitors.

Before the discovery of acrosin (1959) BURUIANA measured « trypsin activity » in semen of mammals and birds. He wrote in Romanian except for a brief note in French (Naturwiss. 1956, 43, 523). According to this note avian semen has high « trypsin activity » while mammalian semen has none, or a trace. Yet authors repeatedly cite BURUIANA’s note as evidence for TLP in mammalian spermatozoa. With the help of Romanian-English translations from Dr BURUIANA we have confirmed his findings. We have examined both spermatozoa and solubilized acrosin. Cock and ram preparations hydrolyse BAEE but only the former are active in BURUIANA’s gelatin assay.


La majorité des études dans ce domaine portent sur la recherche d’anticorps spermagglutinants dans le sérum et le plasma séminal d’hommes infertiles. L’existence et la signification d’autoagglutinants dans le sperme a été beaucoup moins étudiée.

Les agglutinats sont souvent méconnus par certains laboratoires. D’autres leur accordent une trop grande importance.

Afin de tenter de clarifier, même partiellement, la question des autoagglutinations spermatiques, un protocole d’étude de la dynamique de formation de ces agglutinats a été mis au point. Une recherche des conditions physiques favorisant leur apparition a été également entreprise. Dans la mesure où cette étude sera fructueuse elle sera rapportée.