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## APRIL 1976 -

The Spring Meeting of the Session 1975–6 was held on Thursday and Friday, 1 and 2 April 1976, at the Department of Anatomy, Downing Street, Cambridge. The programme included a Symposium on the Organization of the Visual Pathways. The following are authors' abstracts of papers presented.

28. Effects of blastocysts and of copper IUDs on endometrial arylamidase in the rabbit. By H. W. DENKER (introduced by T. W. GLENISTER). Department of Anatomy, University of Aachen, West Germany

Activity of an amino acid arylamidase, an aminopeptidase type enzyme splitting leucine $\beta$ -naphthylamide, increases dramatically in rabbit uterine epithelium during preimplantation stages of pregnancy. The enzyme is also found in the uterine secretion with a sharp peak (in the range of 1000 mU/mg protein) at 5 days *post coitum*. Using both histochemical and biochemical methods, the blastocyst is shown to stimulate discharge of the enzyme into the uterine lumen, the appearance of the peak being retarded in the absence of blastocysts. Eight hours before implantation, less activity is left in the blastocyst site than in the inter blastocyst uterine epithelium, the difference becoming very obvious until 8 days *post coitum*. Blastocyst-sized inert beads fail to induce this local decline in endometrial enzyme activity, nor do beads containing various hormones. Copper IUDs cause, within 24 hours after insertion, local loss of arylamidase activity in the surrounding endometrium. Copper ions are shown to inhibit the enzyme, while blastocysts stimulate discharge of the enzyme into the uterine secretion. It is assumed that this may be one way how copper IUDs interfere with late preimplantation development and implantation.

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