

the temporal relation of the mucosa to the menstruation from the microscopic conditions alone.

The premenstrual changes of the mucosa deserve special attention. They can only be estimated in their full significance when the young decidua is brought into comparison with them. We then recognise that we have before us premenstrually the beginning of a decidua-formation both morphologically and functionally; there only exist differences of grade between the two. If hæmorrhage does not occur and conception follows, the decidua is formed from the premenstrual mucous membrane merely by the further development of the latter.

In this resemblance of the premenstrual mucous membrane to a decidua lies also the significance of the cyclic transformation which renders such a development possible every month.

A comparison with what takes place in animals demonstrates the significance of what is functionally the most striking and tangible phenomenon in the premenstrual mucous membrane and in the decidua, viz. the formation of secretion by the glands of the body of the uterus. The authors, from some few investigations made on the uterus of the dog, came to the conclusion that there is a great resemblance between the premenstrual mucous in man and that of the dog in "heat," and they note the probability that the "heat" of mammals which have no regular secretion of blood is homologous to the menstruation of man. Thus, since it is generally admitted that "heat" signifies the preparation of the mucous membrane for the admittance of the ovum, they believe that we are justified in making the same assumption regarding the premenstrual metamorphosis of the mucous membrane. The impregnated ovule would accordingly establish itself in the mucous membrane of the uterus in the premenstrual phase; the impregnated ovule would accordingly be that of the first period missed. It must be imagined that the ovule, within a period which begins six or seven days before the commencement of the menstruation, reaches the cavity of the uterus and so comes to nidation. Since we are obliged to allow for a longer and hitherto undetermined period of time to account for the migration of the ovule through the canal of the Fallopian tube, the extravasation of the ovule from the follicle and the conception might perfectly well take place in the postmenstrual period or in the interval. The nidation, however, would occur in the premenstrual phase.

With regard to the question whether hæmorrhage takes place by rhexis or diapedesis, the authors express the opinion that probably both processes occur. They were unable to determine the cause of the hæmorrhage itself.