

AN EARLY HUMAN EMBRYO FROM ENDOMETRIAL CURETTAGE

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Early human embryos are rare. The finding of them in endometrial curettages is uncommon. Hertig and Rock (1944) Hertig *et al.*, (1956) and Hertig (1967) did pioneering study of the early human embryos and have described a fertilised ovum as early as of 7 to 7½ days. Rani *et al.*, (1971) described an early human embryo in an endometrial curettage specimen in which they could not identify the embryonic disc but only a linear disc like area.

We recently came across a specimen in an endometrial curettage in which a well preserved embryonic disc could be made out. The finding is being reported because of its rarity.

CASE REPORT

An endometrial curettage was done on a 22 year old woman for primary sterility on the 26th day of menstruation. Her periods were regular and of 28 day cycles. There was no other finding of significance.

Grossly the endometrial curettings did not reveal any abnormality.

Microscopically the early embryo measured 2.4 mm. in diameter (Fig. 1). The endometrium showed a well marked late secretory phase with oedema and predecidual reaction. In the periphery of the embryo primordial villi could be seen. Intervillous spaces could be seen. Placental site giant cells were evident. (Fig. 2). The embryo consisted of tall columnar epithelium separated from the trophoblast by the amnion, its cavity and the mesoderm. (Fig. 3).

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On the other side it was in contact with the primitive entoderm of the yolk sac with a basement membrane in between. Angiogenesis was not very evident yet.

Comment

The patient had an endometrial curettage for primary sterility. She did not miss her periods. So assuming that ovulation could have occurred on the 14th day or so the present embryo could be 12 to 13 days old. The villi are just beginning to form and the size of the embryo corresponds to 12 to 13 days as described by Hertig (1967). Moreover, the viable embryonic disc seen shows that this patient could have ovulated on 14th day as conception occurring if ovulation has occurred on 15th day or later has only 1/2 the chance of becoming viable (Hertig, 1967).

Summary

An early human embryo is reported with illustrations.

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See Figs. on Art Paper IX