

EARLY EMBRYO IN ENDOMETRIAL CURETTAGE

(A Report of 2 Cases)

by

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Introduction

Very young human embryos are a rare finding in the uterine curettings and can pose a diagnostic histological problem if not seen earlier. Hertig, Rock and Adams (1956) described changes in 34 human embryos during the first 17 days of their development over a span of 15 years. The same detailed information is quoted in the text books on human embryology. Because of its rarity, 2 cases of early human embryo detected during a period of 13 years from more than 10,000 endometrial curettings are being reported.

Case 1

K. K., a 17 year primipara presented with irregular bleeding of 15 days following amenorrhoea of 1 month and 10 days duration. Prior to this, her menstrual history was normal.

On examination, the uterus was bulky, anteverted and non-tender. The fornices were clear. A diagnostic curettage was performed and fleshy curettings obtained.

On histological examination, the endometrium was found in the secretory phase. In one area was seen an embryonic disc surrounded by a blastocoele (Fig. 1). The blastocoele was divided

into two areas—the amniotic sac, lined by columnar epithelium and the yolk sac lined by cuboidal epithelium. Secondary yolk sac was forming. The trophoblastic wall was made out in the upper part. The decidua basalis and the developing chorionic villi were seen to traverse the implantation cavity. Blood spaces were seen between them. Cells of the embryonic disc were well preserved indicating that the embryo was alive at the time of curettage. As compared with the early embryo described by Hertig, Rock and Adams (1956) the age of this appears to be about 14-15 days.

Case 2

M.K., a 20 year female presented to the hospital with the chief complaint of inability to conceive. Her LMP was 24 days back.

On examination, the uterus was anteverted, normal in size, and non-tender. Fornices were clear. An endometrial curettage was done for evidence of secretory activity.

Microscopic examination showed that the endometrium was in secretory phase. In addition was seen an early embryo lying in the implantation cavity filled with blood cells (Fig. 2). The decidua basalis, decidua capsularis and syncytial trophoblasts with irregular lacunae filled with blood cells were seen. The inner cell mass could be made out. The embryo corresponds to 9th day of development. (Hertig & Rock, 1944).

Discussion

The discovery of human embryo in the endometrial curettings is a rare finding. The 2 cases described above showed

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Accepted for publication on 20-3-81.

embryos in different stages of development as an incidental finding. One of the cases presented with vaginal bleeding following amenorrhoea, while the other one presented with primary sterility. A solitary case described in reference by Sudha Rani *et al* (1971) presented with excessive vaginal bleeding. The embryo discovered was again a chance finding and was reported to be dead causing spontaneous abortion.

Summary

Two cases of early human embryo in

endometrial curettings seen as an incidental finding are being reported. Their presentation, histology and the development have been discussed.

References

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3. Sudha Rani., Maheshwari, H. B. and Kumar, S.: *Indian Journal of Path. and Bact.* **14**: 51, 1971.

See Figs. on Art Paper I