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A novel endometrial organ culture system: observations on its use for studies of the initial phase of embryo implantation Denker H.-W., Hohn H.-P., Bükers A, Classen-Linke I, Donner, A.

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An endometrial organ culture system has been developed which includes the following sprecific features:

- Preincubation of endometrial fragments in shaker culture results in regeneration of a complete epithelial lining;
- preservation of organotypic tissue structure is quite satisfactory, and there is no central necrosis;
- 3. certain hormone responses can be obtained in vitro;
- 4. blastocysts show remarkably good development in co-culture with these precultured endometrial fragments.

Observations on the use of this novel system for studies on the initial phase of blastocyst implantation, in vitro, will be described. The system shows remarkable selectivity for trophoblast attachment and invasion, whereas various types of malignant tumor cells are found unable to penetrate the intact uterine epithelium under the used in vitro conditions.

Literature: Denker H.-W., Busch L.C., Kühnel W.: Anat.Anz. <u>156</u>, 142 (1984); Hohn H.-P., Denker H.-W.: Europ.J.Cell Biol., Suppl. <u>7</u> (Vol. <u>36</u>), 28 (1985); Hohn H.-P., Donner A., Denker H.-W.: Europ.J.Cell Biol., Suppl. <u>12</u> (Vol. <u>39</u>), 18 (1985).