

Dear Editor,

The published article by Dr. Ai, et al. (1) on the secretion of vascular endothelial growth factor (VEGF) in a three-dimensional endometrial culture was of great surprise to me as this model had been earlier introduced by Fasciani, et al. (2) in 2003. This model was later developed by me (3, 4) and endometrial effects of different medications were evaluated in this model (5-7).

- Noting the endometrial tissue explants which are situated in a fibrin jell as extracellular matrix, gene expressions and growth factors secretions seem to mimic natural conditions, especially during the first few weeks which the primary endometrial tissue exists and has not been replaced by the new cell generations (2).

- VEGF secretion by human endometrium is not a new finding and it has been previously discussed (8, 9) which mars the justification for doing the study.

- The main problem of the undertaken study lies in the fact that it does not express the time of supernatant collection from the wells. Regarding the replacement of the culture media in three-day intervals in this model_ nine times during the study _ one cannot identify the time VEGF has been assayed (on the 3rd, 6th, ninth or other days?) Additionally, no measuring unit has been provided for the changes in the amount of secreted growth factor. Furthermore, endometrial stromal cells have been claimed to be the source of VEGF secretion but the authors should have considered endometrial epithelium (10) or even the neutrophils present in the endometrial stroma (11) as the probable sources.

- The authors have equaled their study with that of Fugii et al. (12) while the endometrium of patients with endometriosis differs from normal endometrium (13), a point which has been addressed in my previous articles (7).

- And needless to say that secretion of VEGF is regulated by sex hormones. Use of endometrial samples from patients with ovarian cysts seems to be another weakness of the study. Noticing the underlying hormonal disorders in these patients (14), the endometrial biopsies in Ai, et al study cannot be regarded as normal entities.

- There seems to be some incoherencies between the text and the references provided, e.g. for references 4, 5, 10 and 11 in the introduction and 23 in the discussion.

- The magnification of the figures does not seem

to be accurate and it seems a unique magnification has not been utilized.

- The definition provided for endometriosis does not seem to be precise as endometrial glands and stroma grow in the extrauterine space and not endometrial vasculature.

- Moreover, use of 0.15 M thrombin concentration needs to be justified by the corresponding author as earlier studies have utilized thrombin dissolved in 0.15 M NaCl for such a model (2-6).

- Finally, the first sentence of the conclusion which introduces the aforementioned study as a model for endometriosis cannot be accepted as such.

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