

Factors predicting improved success with use of GCSF in thin endometrium



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RESEARCH FINDINGS:

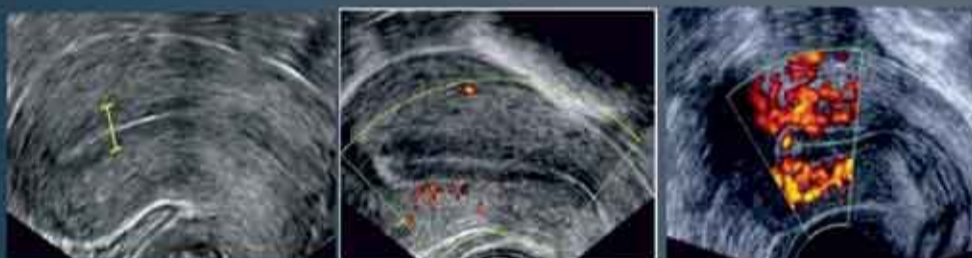
- ❖ There is significant increase in the pregnancy rates of patients with thin ET (endometrial thickness) and poor endometrial vascularity who received 2 doses of intrauterine GCSF (Granulocyte colony stimulating factor) (Endokine 300mcg/ Intas).
- ❖ The patients with good vascularity despite of thin ET did not benefit significantly with GCSF.
- ❖ *Poor endometrial vascularity might be good predicting factor to trigger the use of GCSF in resistant thin endometrium patients.*

What is already known about thin Endometrium & GCSF:

- The minimum measurement of the endometrium which results in acceptable pregnancy rates is still inconclusive.
- A wide range of therapies have been tried and tested for improvement of endometrial thickness with non definitive conclusions.
- The pilot study of Gleicher et al., showed the role of GCSF on endometrium expansion in women with unresponsive endometrium, all though they failed to prove the same in subsequent publications.

What we investigated?

To see if there is a subgroup of patients with thin endometrium that would benefit from GCSF than using it universally.



THIN ENDOMETRIUM

THIN ET WITH G I VASCULARITY

THIN ET WITH G III VASCULARITY

Study design: Prospective observational study conducted at Care IVF Kolkata, India.

Duration The cases undergoing IVF from January 2015 to December 2015

Size :A total of 38 cases fitting the inclusion criterion were evaluated for effect of GCSF on the vascularity and endometrial expansion.

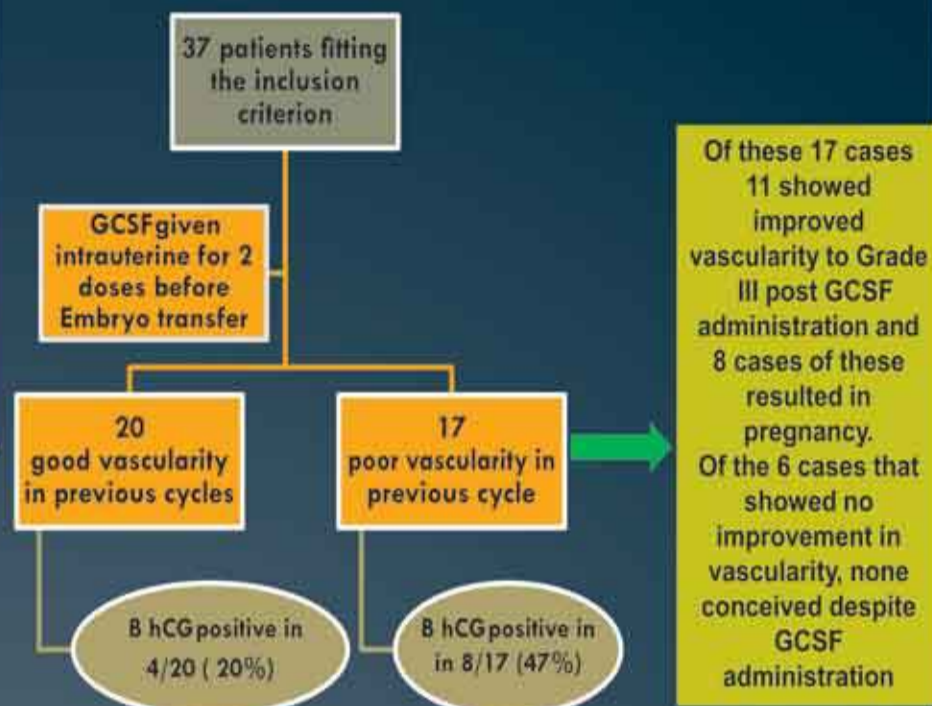
Controls : The cases served as self controls from their previous failed or cancelled cycles.

Inclusion criteria:

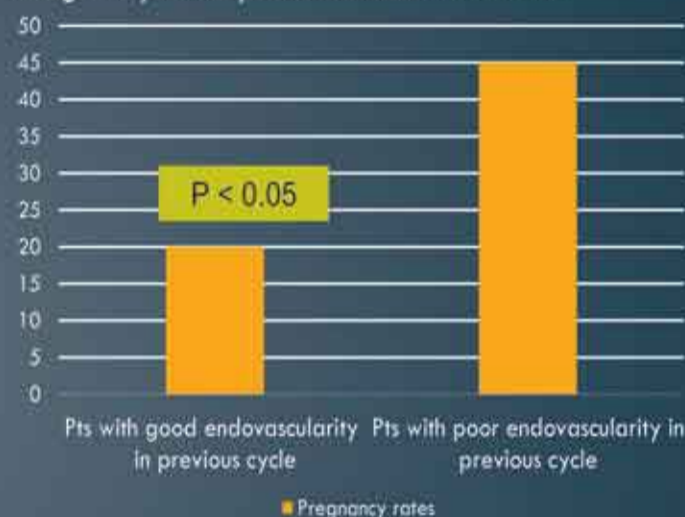
- women aged 18–45 years,
- previously cycle cancelled at least because of thin unresponsive endometrium(<6mm)
- previously failed IVF due to poor endometrial measurement(6-8mm)
- the lack of contraindications for GCSF treatment
- no genital tuberculosis, Asherman's, fibroids, and polyps

The primary end point : Increased endometrial vascularity.

The secondary end point :Positive B hCG after embryo transfer.



Pregnancy rates post GCSF administration

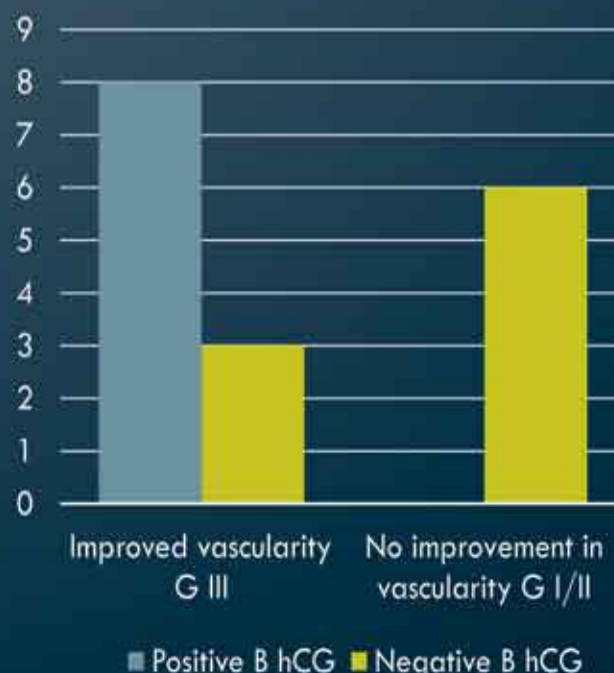


Vascularity of thin endometrium pts in previous cycle n=37

■ Good vascularity (20) ■ Poor vascularity (17)



Improvement of vascularity post GCSF in thin ET and pregnancy results



No pregnancy was noted in patients without improved vascularity despite of increased ET after GCSF administration