# Poster number P 29.14. Thin Endometrium: Can Vascularization influence in eggdonaction outcome? Moliner B, Sellers F, Lozano JM, Llacer J, Bernabeu R. Instituto Bernabeu. Alicante

#### Introduction

Women with lower uterine volume (<2.5 ml) is correlated with thin endometrium and both were less likely to achieve a successful treatment. The aim of our study is to establish that in these patients with lower prognosis we can associate lower endometrial vascularity with worse outcome.

### **Methods**

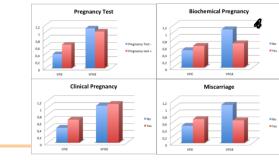
A retrospective study has been made. 186 patients undergoing egg donation were collected between 2012 and 2013. 60 patients had an endometrial volume less than 2.5 ml (A group) and 126 patients had it more than 2.5 ml (B group). We have performed U-Mann Whitney analysis to establish statistical association. First objective was to analyse the association of endometrial and subendometrial vascularization parameters (VI, FI and VFI) and eggdonation outcome (pregnancy test, clinical pregnancy, biochemical pregnancy and miscarriage) in patients with endometrial volume less than 2.5 ml.

### Results

No differences between groups were found in age, fertilization technique (IVF or ICSI), number of eggs donated and fertilization rate. Better outcome was observed in B



Figure 1 and 2. Images of poor endometrial volume, that is observed directly in a 3D scan.



group respect A group (Clinical Pregnancy: 59.3% vs. 41.1%;p=0.034). In B group, vascularity didn't have differences between groups in eggdonation outcome, nevertheless when A group achieved good result, vascularity is higher. However, we observed lower subendometrial vascularity in patients that had suffered a miscarriage or a biochemical pregnancy (Fig. 4), these differences didn't have statistical association.

Figure 3. Subendometrial Vascularization is defined as vascularity from 0.5 cm of the endometrial wall.

Figure 4. Eggdonation outcome in endometrial volume less than 2.5 ml. Vascularization-flow index endometrial (VFIE) and subendometrial (VFISE) has been showed

## Conclusion

Endometrial vascularity isn't enough important when we achieved a good endometrial volume. Lower subndometrial vascularity could influence in eggdonation outcome. A new tool to assess the prognosis could be 3D powerdoppler for thin endometrium.