

TITLE: Case Series – THREE COUPLES WITH LOW AMH LEVELS ACHIEVING SUCCESSFUL PREGNANCIES USING NAPROTECHNOLOGY¹.

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BACKGROUND: AMH (Anti Mullerian Hormone) levels are commonly measured in fertility clinics to assess ovarian reserve and give an indication of female fertility potential. AMH levels are useful in deciding on stimulation protocols for IVF cycles². In addition high AMH levels are useful to confirm a diagnosis of polycystic ovaries. Currently AMH levels cannot be used to predict a couple's ability to conceive naturally but in practice those with low AMH levels are often advised to consider donor eggs through IVF, with minimal attempt at natural conception. This paper attempts to show that ovarian stimulation with natural conception is a reasonable option for women with low AMH.

MATERIALS AND METHODS: Three cases of couples with low AMH, who were previously advised that their best option for conception was with donor eggs through IVF. Each couple had low AMH levels consistent with reduced ovarian reserve indicating a poor chance of success with IVF using their own eggs. AMH levels were 0.07pmol/l, 3.2pmol/l and 2.8pmol/l respectively. The first couple was advised against trying IVF with their own eggs and to consider donor eggs or adoption. The two subsequent couples had failed IVF using their own eggs and one had an additional failed cycle of IVF using donor eggs. Each couple attended our fertility clinic for treatment during 2012. We used the NaProTechnology approach pioneered by Professor Thomas Hilgers and practiced in our clinic since 1998. Couples learned how to monitor their biological markers of fertility using the Creighton Model FertilityCare System³ (CrMS). They had ovulation induction with letrozole or clomiphene and were instructed to attempt conception during days of best mucus quality. In addition they were advised to have ultrasound follicle tracking to confirm follicle rupture and to have a monthly blood test for progesterone and oestradiol on day 7 post ovulation to confirm optimum fertility potential.

RESULTS: Three couples had successful ovulation induction and natural conception without the need for any artificial intervention. All three couples had successful singleton pregnancies with healthy babies delivered at full term.

CONCLUSIONS: Women with low AMH levels should be given a trial of ovulation induction with letrozole or clomiphene combined with ultrasound follicle tracking, monitoring the biological markers of fertility, and timed blood tests on day 7 after ovulation to assist with natural conception.

References

1. Tham, E., Natural Procreative Technology for infertility and miscarriage. Canadian Family Physician Vol 58: May 2012
2. Bhide, P., The role of anti-müllerian hormone as a predictor of ovarian function. The Obstetrician and Gynaecologist. July 2012 Volume 14, Issue 3, pages 161–166
3. Howard MP, Pregnancy probabilities during use of the Creighton Model Fertility Care System. Archives of Family Medicine. 1999 Sep-Oct;8(5):391-402
4. Makinoda, S. Granulocyte Colony-Stimulating Factor (G-CSF) in the Mechanism of Human Ovulation and its Clinical Usefulness. [Current Medicinal Chemistry 2008](#): Volume 15, Number 6, 604-613(10)