The two sides of the individualization of controlled ovarian stimulation

Dear Sir,

We read with great interest the article entitled ‘Individualization of controlled ovarian stimulation in IVF using ovarian reserve markers: from theory to practice’, published in Human Reproduction Update (La Marca and Sunkara, 2014). The authors performed a wide literature review over the issue of individualizing the ovarian stimulation in IVF cycles, according to predicting markers of ovarian response. Additionally, two different normograms are proposed for calculating the ideal FSH starting dose, based on age, serum FSH and either antral follicle count or serum anti-Müllerian hormone (AMH).

The choice of a particular regime of controlled ovarian stimulation (COS), with FSH doses based on individual characteristics sounds tempting, as individualization might be seen as the key to success in this step of assisted reproductive techniques. Authors justify that individualization may reduce the number of cycles cancelled due to inappropriate ovarian response (hyper or poor) and that this would lead to reduced costs and dropout rates. However, we should always keep in mind that there are two sides to every coin. The choice of an individualized scheme for each patient would demand additional exams to define the ovarian response (hyper or poor) and that this would lead to reduced costs and dropout rates. However, we should always keep in mind that there are two sides to every coin. The choice of an individualized scheme for each patient would demand additional exams to define the expected ovarian response. The need for more examinations, such as AMH, brings additional costs for the couples seeking treatment. If we consider that as many as 22% of couples incur catastrophic expenditure starting dose, based on age, serum FSH and either antral follicle count or serum anti-Müllerian hormone (AMH).

Even considering that individualization of COS should be performed, we do not agree with the suggestion that women with predicted poor ovarian response should always be submitted to high-dose FSH regimens (La Marca and Sunkara, 2014). For this group of women, we should consider less expensive COS: a recent systematic review showed that COS with clomiphene citrate + low dose gonadotropins + GnRH antagonist resulted in a trend to better pregnancy rates and number of oocytes retrieved when compared with the classic high-dose FSH regime (Figueiredo et al., 2013). Reducing the costs for these women is even more important than for women with normal ovarian reserve: the pregnancy rate per cycle is much reduced and they will probably need several cycles before achieving pregnancy.

Conversely to COS individualization, some large centres are adopting a low cost, mild and fixed COS, regardless of age or expected ovarian response associated with a single embryo transfer policy (Kato et al., 2012). Using such an approach they reported acceptable pregnancy and live birth rates (obviously depending on women’s age), minimizing the costs and risks of assisted reproduction techniques.

In summary, we believe that when individualizing COS, low-cost regimens using clomiphene citrate should always be considered for women with predicted poor ovarian response. However, we think that individualization of COS still needs to be looked at with caution: examining assisted reproduction as a whole, and not only to the immediate results, the use of fixed, low cost and low-risk COS seems to be even more interesting.

References


Danielle M. Teixeira1 and Wellington P. Martins1, 2,*

1Department of Obstetrics and Gynecology, Medical School of Ribeirao Preto, University of Sao Paulo, Ribeirao Preto, Brazil
2School of Health Technology, Ultrasonography School of Ribeirao Preto (FATESA-EURP), Ribeirao Preto, Brazil

*Correspondence address. Av. Bandeirantes, 3900-8 andar – HCRP – Campus Universitario, Ribeirao Preto, Sao Paulo 14048-900, Brazil. Tel. +55(16)3602-2583; Fax: +55(16)3633-0946. E-mail: wpmartins@gmail.com doi:10.1093/humupd/dmu013

Advanced Access publication on March 18, 2014

Reply: The two sides of the individualization of controlled ovarian stimulation

Dear Sir,

We thank Teixeira and Martins for their interest in our paper titled ‘Individualization of controlled ovarian stimulation in IVF using ovarian reserve markers: from theory to practice’ published in Human Reproduction Update (La Marca and Sunkara, 2014). We appreciate their agreement that individualization of ovarian stimulation sounds tempting and