Letters to the Editor

Metformin in therapy naïve patients with polycystic ovary syndrome

Sir,

We have read with great interest the paper by Moll et al. (2007) recently published on Human Reproduction Update. The aim of this systematic review was to assess the efficacy of metformin administration in the total spectrum of treatment possibilities for polycystic ovary syndrome (PCOS) patients in terms of fertility improvement, and having as primary end-point the live-birth rate.

The authors (Moll et al., 2007) concluded that clomiphene citrate (CC) is still the first choice therapy for infertile women with PCOS. To draw this conclusion, the authors evaluated eight randomized controlled trials (El-Biely and Habba, 2001; Singh et al., 2001; Sahin et al., 2004; Palomba et al., 2005; Raja et al., 2005; Khorram et al., 2006; Moll et al., 2006; Legro et al., 2007). Although the primary end-point was the live-birth rate, in only four studies (Sahin et al., 2004; Palomba et al., 2005; Moll et al., 2006; Legro et al., 2007) the efficacy of the treatment on live births was assessed. In addition, if the conclusion regards therapy naïve PCOS patients, the studies by Sahin et al. (2004) and Khorram et al. (2006) should be excluded since in both studies, as detailed in the materials and methods sections, a metformin pre-treatment was administered continuously for three months (Sahin et al., 2004) or cyclically for 14 days (Khorram et al., 2006) before CC treatment. Conversely, these findings could be useful to provide clinical suggestions to drive the best strategy for administrating of both drugs.

In fact, we think that for therapy naïve patients it should be clarified and distinguished always between head-to-head trials comparing CC versus metformin versus metformin plus CC and studies evaluating strategy of (combined and/or sequential) drug administration.

In conclusion, even if the study by Moll et al. (2007) gives an important contribution in clarifying the potential role of metformin in PCOS, definitive conclusions regarding the first therapeutic approach should be considered still lacking.

References


Stefano Palomba1 and Angela Falbo

Department of Gynecology and Obstetrics, University ‘Magna Graecia’ of Catanzaro, Catanzaro, Italy.

1Correspondence address. E-mail: stefanopalomba@tin.it
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Reply: Metformin in therapy naïve patients with polycystic ovary syndrome

Sir,

The literature on metformin and polycystic ovary syndrome includes a lot of confusing information about the type of patient and the type and amount of medication. Our review attempted to clearly distinguish the type of patients, therapies and comparisons. One of the comparisons is clomiphene versus clomiphene plus metformin. When we look at these data, there is no doubt that metformin does not have an additional role next to clomiphene in naïve patients in reaching a live birth. The pooled relative risk for live birth was 1.0 (95% CI 0.82–1.3; three trials with 664 women). Two studies reported multiple pregnancy rates (Moll et al., 2006; Legro et al., 2007). After combining these data no significant difference was seen (RR 0.38; 95% CI 0.09–1.5; 193 women).