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CORRIGENDUM

Metformin and lifestyle modification in polycystic ovary syndrome: systematic review and meta-analysis

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The authors would like to apologise for an error in the specific meta-analysis examining the effect of 6 months of lifestyle + metformin treatment vs lifestyle ± placebo treatment in patients with polycystic ovary syndrome (PCOS). This error arose as a result of inaccurate data transfer from a single extraction table of data from Karimzadeh and Javedani (Karimzadeh and Javedani, 2010) and Ladson studies (Ladson et al., 2011a, b) to RevMan analysis software. With limited BMI data at 6 months comparing these two groups, data was obtained from original manuscripts and directly from contacted authors and a new meta-analysis has been performed for change in BMI over 6 months, showing a greater, though not statistically significant reduction in BMI with lifestyle + metformin vs lifestyle ± placebo (95%CI: -0.85, 0.01, p = 0.06) (Figure 3). In the text below we have described the amendments.

In the Results section of the abstract (page 561):

"Lifestyle and metformin were associated with lower BMI (mean difference (MD) -0.73 kg/m^2, 95% confidence intervals (CI) -1.14, -0.32, P = 0.0005) and subcutaneous adipose tissue (MD -92.49cm^2, 95% CI -164.14, -20.84, P = 0.01) and increased number of menstrual cycles (MD 1.06, 95% CI 0.30, 1.82, P = 0.006) after 6 months compared with lifestyle ± placebo."

should be corrected to

"Lifestyle and metformin was associated with a greater BMI reduction over 6 months which didn't reach statistical significance (mean difference (MD) -0.42 kg/m^2, 95% confidence intervals (CI) -0.85,0.01, P = 0.06), lower subcutaneous adipose tissue (MD -92.49cm^2, 95% CI -164.14, -20.84, P = 0.01) and increased number of menstrual cycles (MD 1.06, 95% CI 0.30, 1.82, P = 0.006) after 6 months compared with lifestyle ± placebo".

In the Lifestyle + metformin versus lifestyle ± placebo section of the Results: (page 567):

"Lifestyle + metformin was associated with a lower BMI at study completion compared with lifestyle + placebo (n = 493, MD -0.73 kg/m^2, 95% CI -1.14, -0.32, P = 0.0005) (Fig. 3)."

should be corrected to

"Lifestyle + metformin showed a greater, although not statistically significant, reduction in BMI over 6 months (n = 229, MD -0.42 kg/m^2, 95% CI -0.85, 0.01, P = 0.06) (Fig. 3). Two studies could not provide data on mean change in BMI (Pasquali et al, 2000 and Karimzadeh and Javedani, 2010), with the study by Pasquali et al. reporting a greater reduction in BMI over 6 months with lifestyle + metformin compared to lifestyle ± placebo."

In the Discussion (page 570):

"We report for the first time in a systematic review and meta-analysis in PCOS, that in nine studies with 608 participants analysed, 6 months of combined lifestyle + metformin is associated with a lower BMI and subcutaneous fat and improved menstrual cyclicity compared with lifestyle ± placebo."

Should be replaced with

"We report for the first time in a systematic review and meta-analysis in PCOS, that of nine studies with 608 participants, 229 participants had data on change in BMI over 6 months intervention with lifestyle + metformin compared to lifestyle ± placebo, showing a greater but not statistically significant reduction in BMI, significantly lower subcutaneous fat and improved menstrual cyclicity with lifestyle + metformin compared with lifestyle ± placebo."

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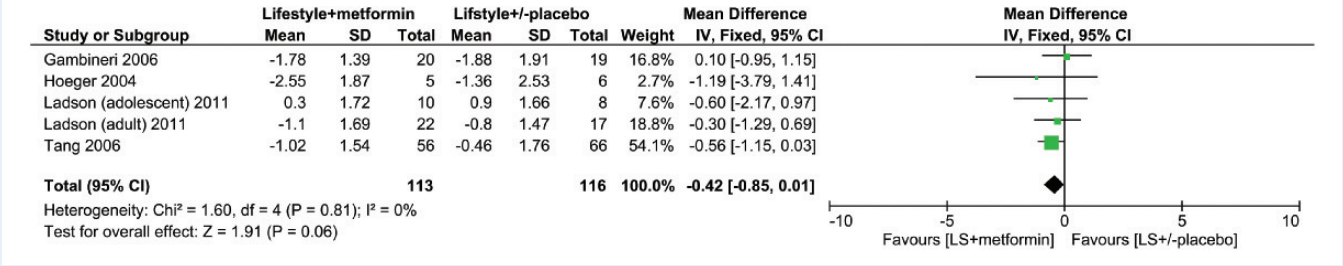

In the Discussion (page 571):

"Here we advance the field demonstrating that adding metformin at a standard dose of 1.5–2 mg daily to lifestyle intervention, resulted in a 0.73 kg/m^2 lower BMI after 6 months compared to lifestyle ± placebo in women with PCOS."

to be replaced with

"Here we advance the field demonstrating that adding metformin at a standard dose of 1.5–2 mg daily to lifestyle intervention, resulted in improved menstrual cyclicity, lower subcutaneous fat and a 0.42 kg/m^2 greater reduction in BMI compared to lifestyle ± placebo in women with PCOS. This difference in BMI reduction didn't reach statistical significance and may be of limited clinical value. However the results were noted over only six months of intervention, and longer term, larger scale randomised clinical trials are needed to clarify the role of metformin in PCOS.

The authors would like to apologise for this error.

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