

Erratum to: Variants in maternal *COMT* and *MTHFR* genes and risk of neural tube defects in offspring

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The original version of this article unfortunately contained a mistake on the arrangement of Tables. The column of sample size “n” should locate under each sub-group (i.e., Anencephaly, Spina bifida, Encephalocele and Total NTDs). The correct Table 2, 3 and 4 are presented here.

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Table 2 Maternal *MTHFR* rs1801131 and rs1801133 genotypes and risk of fetal NTDs in Shanxi Province, China, 2002–2012^a

| Genotype | Anencephaly | | Spina bifida | | Encephalocele | | Total NTDs | | | | | |
|-----------|-------------|------------------------|------------------------|-------------|-----------------|-----------------|------------|------------------|------------------|-----|------------------------|------------------------|
| | n | OR (95% CI) | n | OR (95% CI) | n | OR (95% CI) | n | OR (95% CI) | | | | |
| | | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | | | |
| rs1801131 | | | | | | | | | | | | |
| CC | 7 | 1.84(0.61,5.56) | 1.48(0.42,5.18) | 4 | 1.14(0.33,3.94) | 1.44(0.39,5.29) | 1 | 1.84(0.22,15.38) | 2.91(0.29,28.48) | 11 | 1.51(0.58,3.92) | 1.63(0.58,4.59) |
| CA | 155 | 0.76(0.54,1.09) | 0.78(0.52,1.18) | 67 | 0.86(0.62,1.20) | 1.04(0.72,1.51) | 12 | 0.99(0.49,1.98) | 0.94(0.41,2.12) | 134 | 0.83(0.63,1.08) | 0.91(0.67,1.24) |
| AA | 411 | 1.91 | 1.00 | 206 | 1.00 | 1.00 | 32 | 1.00 | 1.00 | 429 | 1.00 | 1.00 |
| rs1801133 | | | | | | | | | | | | |
| TT | 171 | 1.72(1.09,2.72) | 1.67(0.98,2.84) | 92 | 1.29(0.85,1.96) | 1.18(0.73,1.91) | 10 | 0.70(0.28,1.74) | 1.48(0.56,3.90) | 188 | 1.39(0.99,1.95) | 1.37(0.93,2.03) |
| CT | 281 | 1.59(1.04,2.46) | 1.64(0.99,2.71) | 134 | 1.14(0.78,1.69) | 1.29(0.83,2.02) | 25 | 1.07(0.49,2.29) | 0.79(0.26,2.39) | 290 | 1.30(0.95,1.79) | 1.41(0.98,2.03) |
| CC | 120 | 35 | 1.00 | 1.00 | 50 | 1.00 | 10 | 1.00 | 1.00 | 95 | 1.00 | 1.00 |

Abbreviations: OR, odds ratio; CI, confidence interval; NTDs, neural tube defects.

^a Logistic regression with adjustment for maternal age (<25, 25–29, ≥30); maternal body mass index (<25, ≥25); maternal education (primary or lower, junior high, high school or above); gravidity (1, ≥2); previous birth defect history (yes/no); hyperthermia during early pregnancy (yes/no); periconceptional folic acid supplementation (yes/no); tea consumption (<1 cup/week, 1–6 cups/week, >7 cups/week).

Table 3 Interaction between maternal *MTHFR* rs1801133 and *COMT* rs737865 genotypes in the risk of fetal NTDs in Shanxi Province, China, 2002–2012^a

| Genotype | Anencephaly | | Spina bifida | | Encephalocele | | Total NTDs | | | | | |
|---|-------------|-------------------------|-----------------|-----------------|-----------------|-----------------|------------|------------------|-----------------|-----|------------------------|-----------------|
| | n | OR (95% CI) | n | OR (95% CI) | n | OR (95% CI) | n | OR (95% CI) | | | | |
| | | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted | | | |
| <i>MTHFR</i> rs1801133 | | | | | | | | | | | | |
| TT | 171 | 1.22(0.89,1.67) | 1.03(0.69,1.51) | 92 | 1.17(0.86,1.59) | 0.92(0.64,1.33) | 10 | 0.67(0.32,1.38) | 0.53(0.22,1.25) | 188 | 1.15(0.89,1.47) | 0.98(0.73,1.32) |
| CT/CC | 401 | 1.66 | 1.00 | 184 | 1.00 | 1.00 | 35 | 1.00 | 1.00 | 385 | 1.00 | 1.00 |
| <i>COMT</i> rs737865 | | | | | | | | | | | | |
| CC | 44 | 1.56(0.95,2.56) | 1.34(0.67,2.68) | 29 | 1.41(0.86,2.30) | 1.39(0.73,2.65) | 5 | 1.49(0.56,3.99) | 0.84(0.18,3.83) | 63 | 1.48(0.99,2.22) | 1.38(0.81,2.35) |
| CT/TT | 527 | 223 | 1.00 | 247 | 1.00 | 1.00 | 40 | 1.00 | 1.00 | 510 | 1.00 | 1.00 |
| Interaction (rs1801133 × rs737865) ^b | | | | | | | | | | | | |
| TT × CC | | 3.39(0.94,12.18) | | 2.65(0.72,9.76) | | | | 4.05(0.26,63.54) | | | 3.02(1.00,9.14) | |

Abbreviations: OR, odds ratio; CI, confidence interval; NTDs, neural tube defects

^a Logistic regression with adjustment for maternal age (<25, 25–29, ≥30); maternal body mass index (<25, ≥25); maternal education (primary or lower, junior high, high school or above); gravidity (1, ≥2); previous birth defect history (yes/no); hyperthermia during early pregnancy (yes/no); periconceptional folic acid supplementation (yes/no); tea consumption (<1 cup/week, 1–6 cups/week, >7 cups/week)

^b There are some undetected SNPs for different genes, so the final number included in the interaction analysis is 507 controls and 505 NTD cases (227 anencephalics, 241 spina bifidas and 37 encephaloceles)

Table 4 Interaction between maternal *MTHFR* rs1801133 and *COMT* rs4680 genotypes in the risk of fetal NTDs in Shanxi Province, China, 2002–2012^a

| Genotype | Controls | | Anencephaly | | Spina bifida | | Encephalocele | | Total NTDs | | | | |
|--|----------|-----|------------------------|------------------------|--------------|------------------------|------------------------|----|-----------------|-----------------|-----|------------------------|------------------------|
| | n | n | OR (95% CI) | Adjusted | n | OR (95% CI) | Adjusted | n | OR (95% CI) | Adjusted | | | |
| <i>MTHFR</i> rs1801133 | | | | | | | | | | | | | |
| TT/CT | 452 | 217 | 1.65(1.09,2.48) | 1.65(1.02,2.67) | 226 | 1.20(0.83,1.73) | 1.25(0.82,1.90) | 35 | 0.93(0.45,1.93) | 1.19(0.47,3.04) | 478 | 1.34(0.99,1.80) | 1.39(0.98,1.97) |
| CC | 120 | 35 | 1.00 | 1.00 | 50 | 1.00 | 1.00 | 10 | 1.00 | 1.00 | 95 | 1.00 | 1.00 |
| <i>COMT</i> rs4680 | | | | | | | | | | | | | |
| AA/AG | 295 | 129 | 0.99(0.74,1.33) | 1.11(0.79,1.56) | 121 | 0.73(0.55,0.98) | 0.64(0.46,0.89) | 20 | 0.76(0.41,1.39) | 0.62(0.30,1.27) | 270 | 0.84(0.67,1.06) | 0.83(0.64,1.08) |
| GG | 279 | 123 | 1.00 | 1.00 | 156 | 1.00 | 1.00 | 25 | 1.00 | 1.00 | 304 | 1.00 | 1.00 |
| Interaction (rs1801133× rs4680) ^b | | | | | | | | | | | | | |
| CT/TT × AA/AG | | | 1.16(0.44,3.05) | | | 1.17(0.49,2.77) | | | 0.93(0.13,6.71) | | | 1.21(0.60,2.45) | |

Abbreviations: OR, odds ratio; CI, confidence interval; NTDs, neural tube defects

^a Logistic regression with adjustment for maternal age (<25, 25–29, ≥30); maternal body mass index (<25, ≥25); maternal education (primary or lower, junior high, high school or above); gravidity (1, ≥2); previous birth defect history (yes/no); hyperthermia during early pregnancy (yes/no); periconceptional folic acid supplementation (yes/no); tea consumption (<1 cup/week, 1–6 cups/week, >7 cups/week)

^b There are some undetected SNPs for different genes, so the final number included in the interaction analysis is 508 controls and 504 NTD cases (226 anencephalics, 241 spina bifidas and 37 encephaloceles)