

Erratum

Erratum: Gottschalk et al., “Gemfibrozil Protects Dopaminergic Neurons in a Mouse Model of Parkinson’s Disease via PPAR α -Dependent Astrocytic GDNF Pathway”

In the article “Gemfibrozil Protects Dopaminergic Neurons in a Mouse Model of Parkinson’s Disease via PPAR α -Dependent Astrocytic GDNF Pathway,” by Carl G. Gottschalk, Malabendu Jana, Avik Roy, Dhruv R. Patel, and Kalipada Pahan, which appeared in pages 2287–2300 of the March 10, 2021 issue, Figure 7 was published with an error. The MPTP panel (second column) from Figure 3A was duplicated in the GDNF Δ Astro-MPTP group (fifth column) of Figure 7C. Additionally, the notation for Figure 7C incorrectly labeled *Gfap*^{cre} (top) and *Gdnf* ^{Δ astro} (bottom) instead of left and right, respectively. A corrected version of Figure 7 and an updated Figure 7 legend appear below. These errors do not affect the conclusions of the paper.

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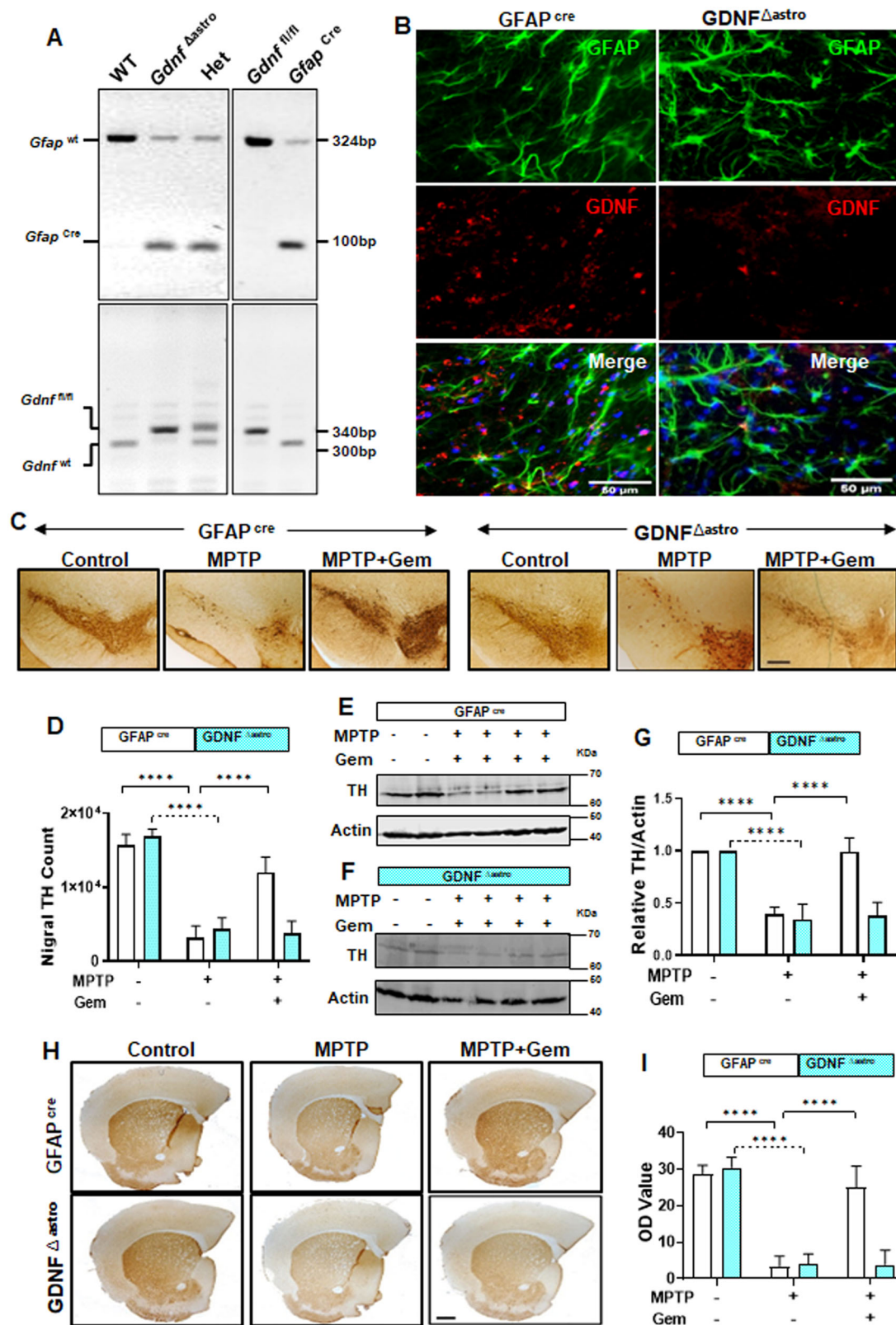


Figure 7. Gemfibrozil (Gem) protects the nigrostriatal pathway via astrocytic GDNF in the MPTP mouse model. **A**, Genotyping of *Gdnf^{Δastro}* (astrocyte-specific GDNF knock-out) mice. **B**, Nigral sections of 6- to 8-week-old *Gfap^{Cre}* mice or *Gdnf^{Δastro}* mice were double labeled for GDNF and GFAP. Results represent the analysis of two sections of each of three mice per group. The 6- to 8-week-old *Gfap^{Cre}* mice ($n = 6/\text{group}$) or *Gdnf^{Δastro}* mice ($n = 6/\text{group}$) were lesioned with MPTP (20 mg/kg body weight/injection, four intraperitoneal injections at every 2 h interval). At 4 h following the last MPTP injection, mice were fed gemfibrozil (7.5 mg/kg body weight/d) via oral gavage for 7 d. **C**, Representative TH immunostaining from both *Gfap^{Cre}* (left) and *Gdnf^{Δastro}* (right) mice. **D**, Stereological counting of nigral TH cells in *Gfap^{Cre}* and *Gdnf^{Δastro}* mice. A two-way ANOVA results in $F_{(2,30)} = 197.4 > F_c = 3.31$ ($***p < 0.0001$) for treatment and $F_{(1,30)} = 13.77 > F_c = 4.17$ for genotype. **E–G**, Representative immunoblots from the nigral lysate tissue from *Gfap^{Cre}* (**E**) and *Gdnf^{Δastro}* (**F**) mice and corresponding densitometric analyses (**G**). Results are the mean \pm SEM of three independent immunoblots. A two-way ANOVA was adopted to identify significant differences between treatment and genotype and found $F_{(2,30)} = 120.1 > F_c = 3.31$ ($***p < 0.0001$) for treatment and $F_{(1,30)} = 42.74 > F_c = 4.17$ ($***p < 0.0001$) for genotype. **H, I**, Representative striatal TH staining from both *Gfap^{Cre}* (top) and *Gdnf^{Δastro}* (bottom) mice (**H**) and corresponding optical density measurements to quantify striatal TH fiber density (**I**). A two-way ANOVA found $F_{(2,30)} = 157.5 > F_c = 3.31$ for treatment and $F_{(1,30)} = 28.03 > F_c = 4.17$ ($***p < 0.0001$). Post hoc Sidak's multiple-comparison tests were used to identify significant differences among the control, MPTP, and MPTP + Gem groups ($***p < 0.0001$) and are represented on the figure.