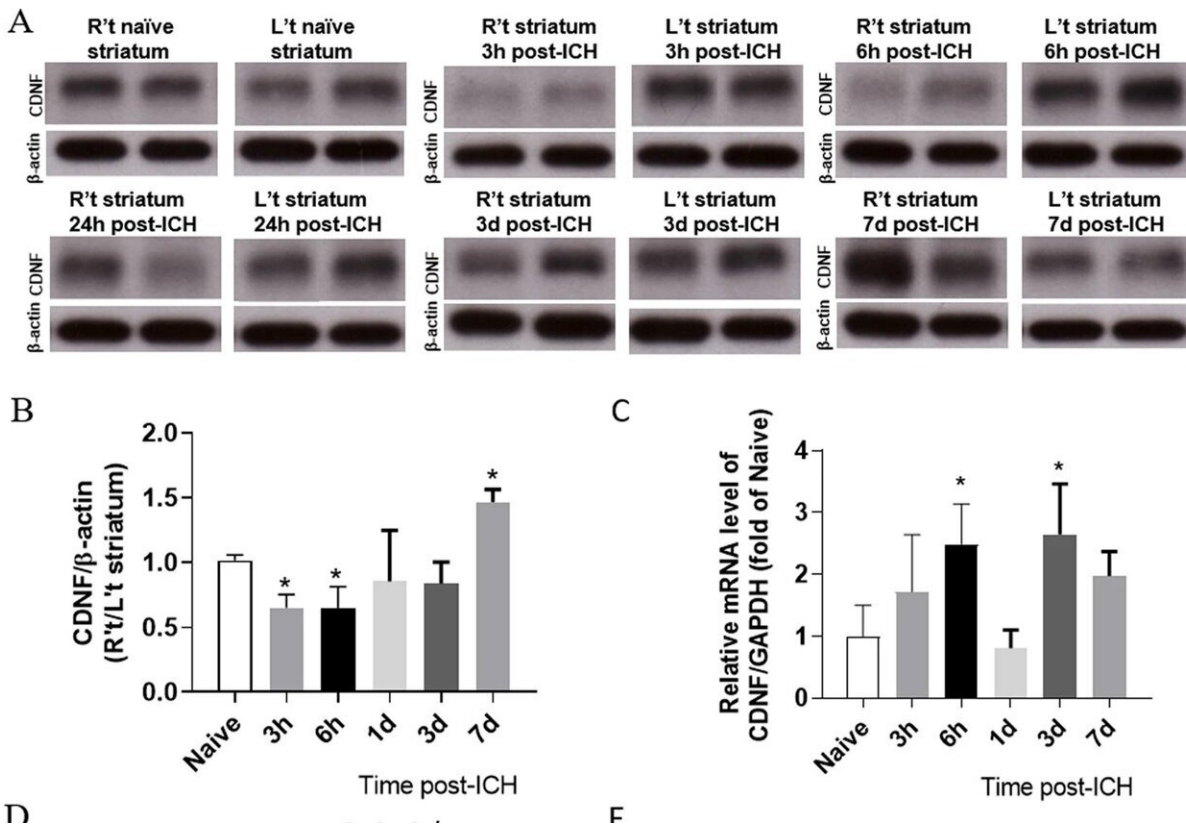


A new way to remove waste from the brain after hemorrhage

March 16 2023



Endogenous CDNF affects the hemorrhagic lesion after ICH. **A** Photograph of representative films demonstrating temporal changes in CDNF protein in the naive striatum and ICH-affected striatum, at 3 h to 7 days post-ICH in SD rats, which were assessed using Western blotting. **B** Bar graph showing the relative levels of CDNF protein in the striatum of naive rats and rats at 3 h, 6 h, 24 h, 72 h, and 7 days after ICH. Data were analyzed as repeated measures by one-way ANOVA followed by Bonferroni corrections ($n = 4$ /time point). **C** Bar graph showing time course of CDNF mRNA levels in hemorrhagic striatum at 3 h to 7

days after ICH in SD rats. Data were analyzed as repeated measures by one-way ANOVA followed by Bonferroni corrections ($n = 3/\text{time point}$). **D** Representative coronal sections (1 mm thickness) showing brain hemorrhagic areas of WT and $Cdnf^{-/-}$ mice killed 3 days after ICH. **E** Lesion volume on days 3 ($n = 7-8$, each group) post-ICH was determined by morphometric measurement. Data were analyzed as two-tailed Student's t -test. **F** Volcano plot of gene expression profiles in hemorrhagic striatum collected after collagenase-induced ICH in WT and $Cdnf^{-/-}$ mice, showing distribution of significance $[-\log_{10}(\text{adjusted } P \text{ value})]$ vs. fold change $[\log_2(\text{fold change})]$ for all genes. The blue dots indicate downregulated genes (fold change

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