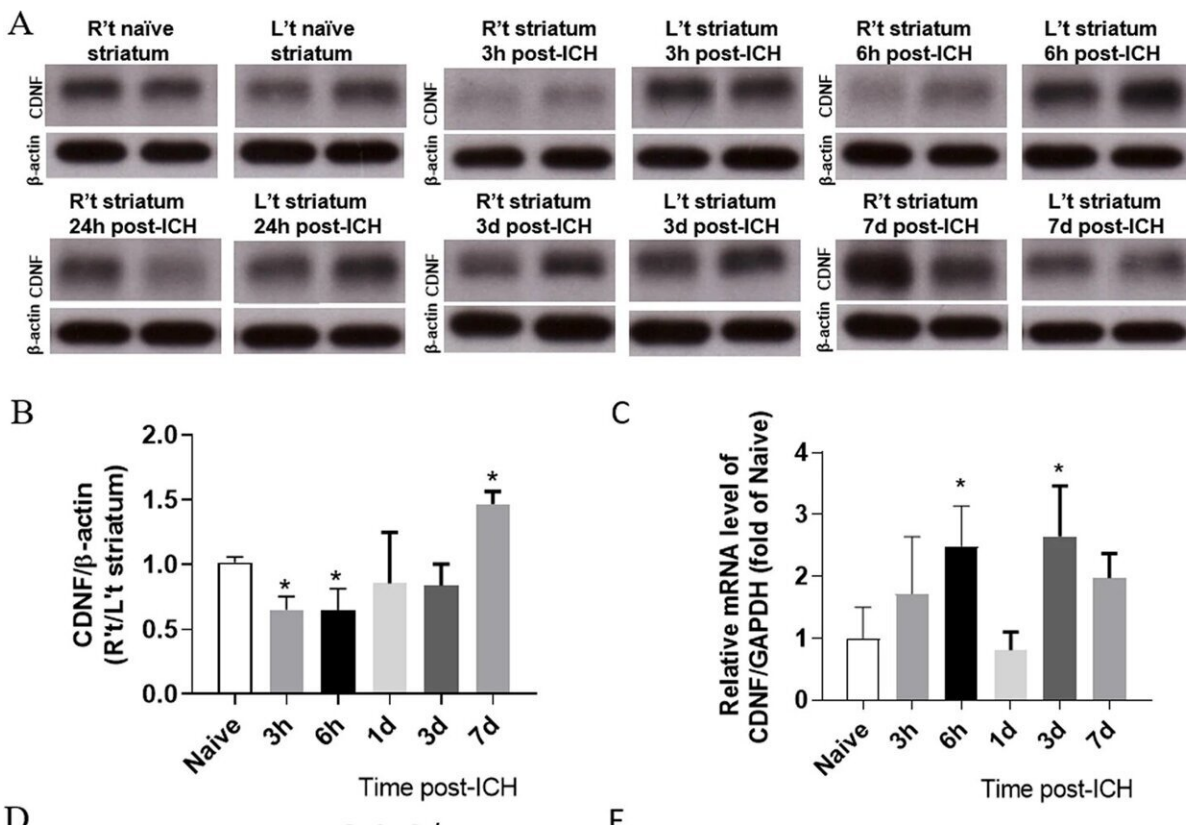


# A new way to remove waste from the brain after hemorrhage

March 16 2023



Endogenous CDNF affects the hemorrhagic lesion after ICH. **A** Photograph of representative films demonstrating temporal changes in CDNF protein in the naïve 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 naïve 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*<sup>-/-</sup> 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*<sup>-/-</sup> 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

Citation: A new way to remove waste from the brain after hemorrhage (2023, March 16) retrieved 10 May 2023 from <https://medicalxpress.com/news/2023-03-brain-hemorrhage.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.