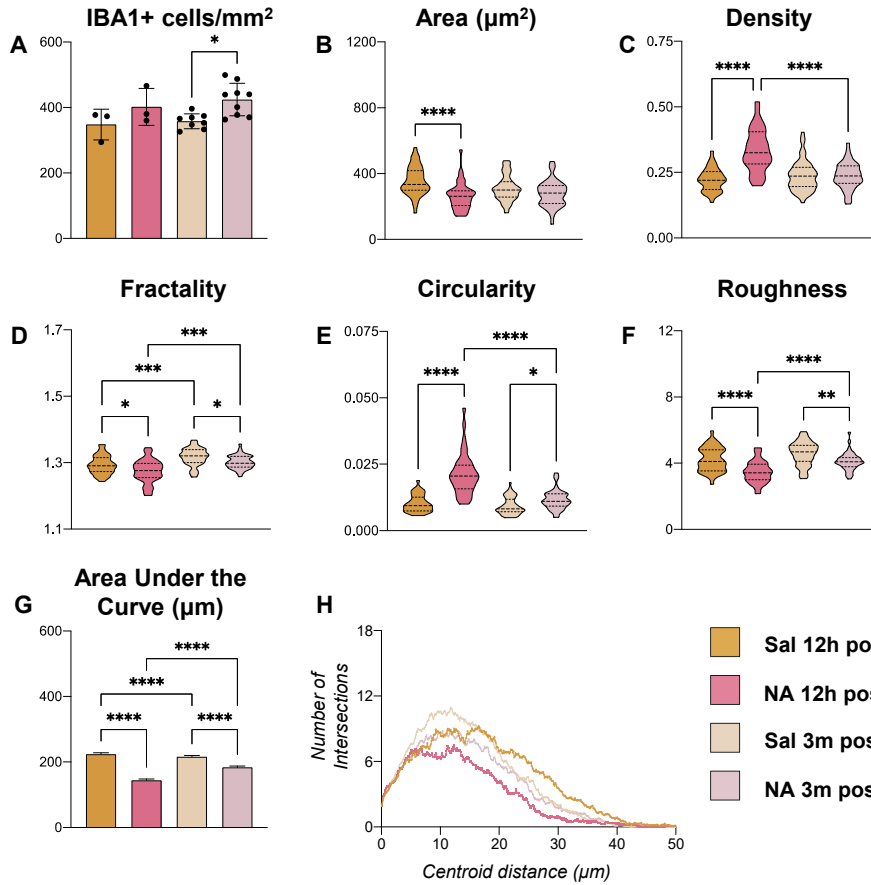


Paraventricular nucleus



Basolateral amygdala

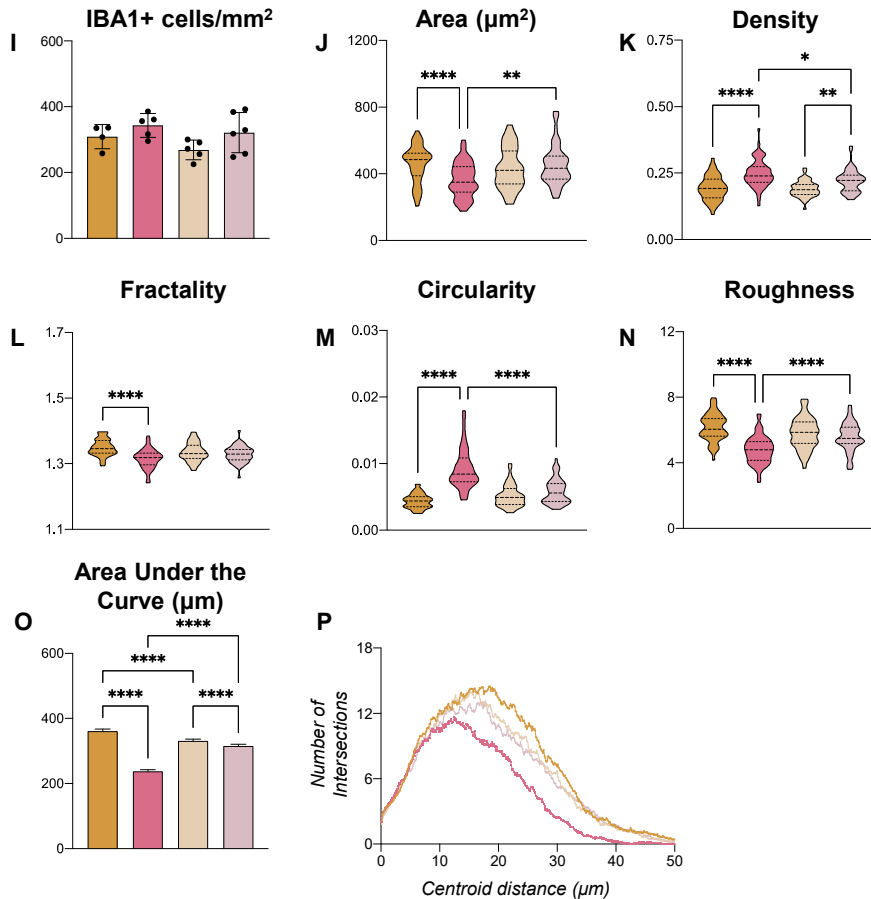


Figure S3. Morphological analysis of microglial cells 12 hours and 3 months after ICV-injection of neuraminidase. Rats were intracerebroventricularly (ICV) injected with neuraminidase (NA) or saline (Sal) and sacrificed shortly after injection (12 hours) or 3 months later. Coronal sections at the level of the paraventricular nucleus (PVN) and the basolateral amygdala (BLA) were immunostained for IBA1 to label microglia. (A, I) IBA1-positive cell counts in the PVN (A) and the BLA (I); the histograms show the mean $\pm$ SD of $n = 3-9$ animals (for PVN) and $n = 4-6$ animals (for BLA) per group. (B-F, J-N) Morphological parameters obtained from Fractal analysis. Data distribution of each parameter is presented as violin plot, which has been truncated at the maximum and minimum values of each dataset; the dashed line represents the median and the dotted line the quartiles. (G, H, O, P) Data from morphological Sholl analysis. The *area under the curve* for the graphs of *number of intersections over distance from the centroid* (H, P) was calculated and presented as histograms (G, O), which show the mean $\pm$ SD of the $n = 170-173$ cells from PVN and $n = 203-209$ from BLA sampled from different animals within each experimental group. One-way ANOVA and Tukey's post-hoc were used as statistical tests. If the data met the assumption of normality and homoscedasticity, two-way analysis of variance (ANOVA) was employed, followed by Tuckey post hoc test for pairwise comparisons between groups. If the assumption of normality was not meet, Kruskal-Wallis test followed by Dunn's post hoc test for pairwise comparisons was used. If normality was assumed but not homoscedasticity, a Brown-Forsythe and Welch ANOVA test was employed, followed by Dunnett's T3 post hoc test for pairwise comparisons. In any of the cases, the groups were considered significant if $p < 0.05$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.