



**Figure S1.** The comparisons of ring and arc angle values of the trajectories for STN lead placement between the no ICH cases and ICH cases (mean $\pm$ SD). (A) Left ring:  $p = 0.0518$  (No ICH cases:  $69.11\pm5.33$ ; ICH cases:  $63\pm3.61$ ). (B) Left arc:  $p = 0.3324$  (No ICH cases:  $109.00\pm3.53$ ; ICH cases:  $107.00\pm0.50$ ). ns, no significant difference.