

Optic nerves were exposed surgically exposed in anaesthetized adult Sprague Dawley rats through using a supraorbital approach and crushed using the an aneurysm clip (YASARGIL) aneurysm clip, which was placed 2 mm behind the posterior eye pole, as described in previous reports. Cultured neural stem cells (NSCs) were transplanted into the subretinal space immediately after the optic nerve crush using a transscleral approach. A 33-gauge-G blunt needle attached to a 10-µL syringe (Hamilton, Reno, NV) was introduced tangentially through the sclerotomy site into the subretinal region and , causing caused retinal detachment. The retinal detachment was confirmed microscopically confirmed. The same procedure was then-repeated to slowly inject a suspension of pigment epithelium-derived factor (PEDF) modified NSCs (2 μ L of 2.0 \times \times 10⁵ cells). In this study, 72 rats withunder going optic nerve injury were randomly assigned to 3-three groups: a group with that received injections of phosphate-buffered saline (PBS) (n = 24), a group that received , group with weekly injections of PEDF (n = 24), and a group that received, and group with PEDF-modified NSCs (n₌24). Subsequently, 0.67 nM of PEDF dissolved in 5 µL of sterile PBS was injected immediately after the optic nerve crush (day 0 days) and at 1 and 2 lweek and 2 weeks thereafter. The rRats (from each group) were examined at each of the time points postinjection (2 or and 4 weeks). At each time point, Samples were harvested and placed at each time point into a protein extraction buffer. Equal amounts of protein were denatured for 5 minutes at 95 °C in a sample buffer and then separated by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDSPAGE).

Comment [A1]: In American English, words with "ae" such as anaesthetic, leukaemia, and anaemia lose the "a" and become anesthetic, leukemia, and anemia, respectively.

Comment [A2]: Abbreviations are generally defined at their first use in the text, and the abbreviated form is consistently used thereafter.

Comment [A3]: Generally, two or more words that come before a noun they modify and act as a single idea are hyphenated to ensure the idea is communicated clearly.

Comment [A4]: Spaces are generally inserted before and after arithmetic symbols.