

How repairing the gut saves brain function after stroke

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Host: Middle aged; Donor: Adult





Effect of IESC transplants on gut architectures after stroke. a) Representative photomicrographs of H & E stained sections (10 μ m) from sham, MCAo-vehicle



treated and MCAo-IESC treated adult female and male rats. In all groups, sham animals (a-left panels) exhibit elongated normal villi and a single row of crypts, while stroke (a-right panel; MCAo + vehicle) results in features characteristic of inflammation including blunted villi (black arrows), disrupted villi (blue arrows), and increased thickness of the muscularis layer as compared to sham (yellow arrows) in mucosa and submucosal layer, crypt hyperplasia and loss of goblet cells. Middle-aged MCAo rats (females; males) treated with adult IESCs show normal elongated villi. b) Histograms depicting mean ± SEM of villus length:width ratio. Villus length to width ratio was measured in H&E-stained sections. N = 7–8 females per group; n = 4–5 males per group. *:p

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