

Genistein is a phytoestrogen and belongs to the category of isoflavones. Genistein was first isolated in 1899 from the dyer's broom, *Genista tinctoria*; hence, the chemical name derived from the generic name. The compound nucleus was established in 1926, when it was found to be identical with prunetol. It was chemically synthesized in 1928.

Previously unstudied, on oxidative damage in cerebral ischemia. Rats were randomly divided into three groups: control group (no medication or surgical procedure), ischemia group, and artery ischemia + genistein group, sacrificed at 24 h after ischemia. The harvested brain tissue from the right hemisphere was investigated histopathologically and for tissue biochemistry. Superoxide dismutase and nuclear respiratory factor 1 values decreased after ischemia and they increased after genistein treatment, while increased malondialdehyde levels after ischemia reduced after treatment. Apoptosis-related cysteine peptidase caspase-3 and caspase-9 values increased after ischemia, but reduced after treatment. Our study revealed that genistein treatment in cerebral ischemia reduced oxidative stress and neuronal degeneration. We believe that genistein treatment may be an alternative treatment method ¹⁾.

¹⁾

Aras AB, Guven M, Akman T, Alacam H, Kalkan Y, Silan C, Cosar M. Genistein Exerts Neuroprotective Effect on Focal Cerebral Ischemia Injury in Rats. *Inflammation*. 2015 Jan 8. [Epub ahead of print] PubMed PMID: 25567369.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=genistein>

Last update: **2024/06/07 02:49**

