

Jellyfish protein helps regrow joint cartilage

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Mucin, a protein extracted from Nomura's jellyfish, has proved highly effective in regrowing cartilage in joints, scientists in Japan claim.

The finding may provide a beneficial use of the jellyfish, also known as echizen kurage, which have been a damage-causing plague to the nation's fisheries.

The curative effect of the protein nearly doubles when it is mixed with hyaluronic acid, a chemical usually used for the treatment of osteoarthritis, according to the results of experiments on rabbits undertaken at Tokai University and the Institute of Physical and Chemical Science.

The results of the research are scheduled to be officially reported at a meeting of the Japanese Society for Regenerative Medicine to be held in Tokyo in March.

Kiminori Ushida, head of the institute, and his team succeeded in extracting the protein from the jellyfish.

The research team eroded cartilage in the knee joints of rabbits to induce symptoms of osteoarthritis and later injected hyaluronic acid mixed with mucin into the worn joints. When they examined the rabbits 10 weeks later, the worn-down cartilage had almost totally regrown.

The recovery rate was about 1.6 to 2.6 times higher than in rabbits that received shots of only hyaluronic acid, according to the team.

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