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IICB scientists connect stress with gastric ulcer

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A scientific team at CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata have for the first time identified the molecular mechanism by which acute mental stress affects the stomach causing gastric ulcer or stress-related mucosal disease.

The team has used drugs that can act specifically on mitochondria present in the stomach to prevent gastric ulcer caused by stress.

Stomach is known as the body's second brain with a specialised neural network, repository of neurotransmitters and different kinds of nerve cells innervating the organ, though fewer in number.

By using a drug that prevents corticosterone from binding to the receptor found inside the cell, the researchers were able to significantly prevent stomach injury in the animals. Corticosterone is the main hormone involved in the regulation of stress response.

Further research can lead to a new generation of anti-stress medications with minimal side effects which would aim at targeting the mitochondrial pathology to take care of a bigger psychosomatic health complication.