

Snail offers clue to how anesthetics work

July 20 2007

A group of London researchers learned additional details concerning how anesthetics work on the human body by analyzing a snail's nervous system.

The study, headed by Imperial College London biophysics Professor Nick Franks, found a molecular feature in the snail's nervous system that is identical to one in the human brain, The Daily Mail said Friday.

While scientists thought the brain's potassium channel played a key role in regards to anesthetics, the theory couldn't be tested until Franks' team cloned a giant pond snail's potassium channel and created chimeric channels to identify a specific amino acid.

By studying that amino acid, the group was able to identify how an anesthetic binds to the potassium channel and limits the amount of neural impulses to the body's neurons.

The British newspaper said the study could ultimately lead to an improved form of anesthetics that have little or no side effects.

Copyright 2007 by United Press International

Citation: Snail offers clue to how anesthetics work (2007, July 20) retrieved 17 April 2024 from <https://medicalxpress.com/news/2007-07-snail-clue-anesthetics.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.