

New invention promises reduced pain injections

June 16 2011

(Medical Xpress) -- A ground-breaking invention, which promises reduced pain for dental injections, has won a major national innovation award for its Newcastle University creators.

The special syringe cartridge works by reducing the acidity of the injection by mixing in a neutralising liquid just before the injection is delivered.

Invented by dentist Dr. John Meechan (pictured) and his team of Chris Lawrence and Phil Harley, the syringe technology won the overall Dental and Oral Health section at The Medical Futures Innovation Awards. Medical Futures rewards new ideas in healthcare from frontline clinicians, scientists and entrepreneurs.

Dr. Meechan said: “Injections need to be acidic so they can be preserved. But that creates a lot of the [pain](#) of the injection and with our device that would not happen. We are not claiming it will be pain free but a large part of the pain will be taken away.

“We are at a very early stage in the development of the product, but this award could be a real boost in our aim of getting it on the market and used by dentists around the world.”

Another team from Newcastle University claimed a prize at Medical Futures. Janet Eyre, Professor of Paediatric Neuroscience and Mrs. Janice Pearse, Senior Research occupational therapist are co-founders of

a newly-established company, Limbs Alive.

Their [invention](#) includes specially adapted controllers and a computer game for those recovering from stroke. Using wireless controllers, players work their way through increasingly difficult levels of the game while behind the activities are sequences of repeated movements which gradually improve the temporal-spatial movement of the patient.

Provided by Newcastle University

Citation: New invention promises reduced pain injections (2011, June 16) retrieved 11 June 2026 from https://medicalxpress.com/news/2011-06-pain_1.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.