



Rainforest remedy could replace the dentist's needle

A natural anaesthetic

A rainforest remedy used for centuries by the indigenous people of Peru to treat toothache has now been made into an anaesthetic gel. The remedy, derived from a species of Amazonian plant called *Acmella oleracea*, is such a potent painkiller the gel could be used as an alternative to anaesthetic injections in western dental surgeries.

Cambridge University anthropologist Dr Françoise Barbira Freedman discovered the natural painkiller while living with the Keshwa Lamas people. Dr Freedman was the first westerner to live with the secretive tribe in the Amazonian rainforest.

She said: "The story began in 1975 when I first went to live among the indigenous people of Peru. We were trekking through the rainforest and I was having terrible trouble with my wisdom teeth. One of the men with me noticed and prepared a little wad of plants to bite into. The pain went away. When it came back a few hours later, he had foreseen the need and kept plant material in his hunters' bag for me."

Years later, a neuroscientist at Cambridge University asked Dr Freedman to bring some medicinal plant samples back to Britain from one of her trips to the region.

"Almost as an afterthought I remembered to include the one I'd used on my teeth. It was added to the bottom of the list, but somehow the list got reversed and it was the first one tested back in the UK. It was immediately successful and we've never looked back," she said. Extracts from the plant have now been included in a gel for medicinal use, and shown to be successful in Phase I and II clinical trials. The gel works by blocking pain receptors in nerve endings.

Patients who feared the dentist's needle and treated with the gel reported higher levels of satisfaction during the clinical trials and were also more likely to attend follow-up appointments.

"This treatment for toothache means we could be looking at the end of some injections in the dentist's surgery. We've had really clear result from the tests so far, particularly for periodontological procedures such as root scaling and planning, and there are many other potential applications," Dr Freedman said.

Dr Freedman has now founded a company, Ampika Ltd, a spin-out from the university's commercial arm Cambridge Enterprise. If Phase III clinical trials are successful, the painkilling gel could be on the market in two years' time. The gel may even be used instead of synthetic painkillers such as Non-Steroid Anti-Inflammatory Drugs (NSAIDs) in certain circumstances.

She added: "We think the remedy is better than current treatments because NSAID drugs are systemic and have long-term effects; the plant product is not systemic and does not have any known side-effects. "We think people prefer to use natural products and this is particularly the case for baby teething – for which, to my knowledge, there is no clinically tested natural alternative."

<http://uk.health.lifestyle.yahoo.net/rainforest-remedy-could-replace-dentists-needle.htm>