# coMra-Therapy Suspends Life-long Migraine for 57-year old Female Patient

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## ABSTRACT

A 57-year old lady had been suffering from severe migraines for all her life (since childhood). She experienced attacks 2-3 times a month. Strong pain medication was at times administered, but this became increasingly ineffective over time. She began self-treatments with coMra-Therapy in November 2011, following the Universal 1 treatment protocol. This was done 1-2 times a day for 4 weeks. She reported that the course resulted in her being migraine-free for three months, and it also led to a reduction in frequency and severity of migraine attacks during the following year.

#### INTRODUCTION

Migraine is a chronic disorder characterized by headache attacks of moderate to severe intensity, unilateral location, aggravation by routine physical activity and is also associated with nausea and/or photophobia and phonophobia [1]. Attacks usually last for several hours, but can last 2-3 days in adults. Women are more likely than men to suffer from migraines and migraines can run in families. Migraine attacks strongly interfere with daily activities, and if attacks are frequent the condition can be very debilitating and cause a major negative effect on a patient's life. Primary headaches, (headaches without an identifiable underlying cause), affect about 46% of people globally and about one fourth of this number are migraine sufferers [2].

There is no cure currently for migraines. Although acute attacks can be suppressed by medications (e.g. triptans), these cause many side effects, and overuse can lead to drug-induced headaches. Drugs designed for the prevention of acute attacks are known to have limitations and they do not work for many patients. This report is the first presentation of a treatment of a life-long migraine with coMra-Therapy.

## CASE PRESENTATION

The patient had been suffering from migraines for most of her life, and reported that attacks occurred 2-3 times a month. Her symptoms included severe pain, nausea, photophobia and vision impairment. Over the years she used various over-the-counter analgesic medications, starting with Aspirin and then progressing to stronger substances, such as Imigran (Sumatriptan). Around 20 years ago she had to receive Sumatriptan through injection from a doctor. However owing to the increased costs at the time she changed to taking Formigran (naratriptan hydrochlorite).

#### TREATMENT

coMra treatments were self-administered, starting November 2011 for 4 weeks, using a first generation 980nm Delta Laser. The treatment protocol used was Universal 1, which consists of the following:

Temples, 1 minute per side at 50 Hz, ultrasound off.

Frontal (forehead), 1 minute per side at 50 Hz, ultrasound off.

Suboccipital (base of scull), 1 minute per side at 50 Hz, ultrasound off.

Carotid sinuses, 1 minute per side at 50 Hz.

Total of 8 minutes.

The above was carried out 1-2 times a day, daily for four weeks. No other therapy was applied and no medication was used.

## RESULTS

The patient reported a noteworthy and, to her, unexpected absence of any migraine attacks for the following 3 months from the end of the treatment course. On average, and based on her medical history, she should have experienced up to 9 attacks during that period. She reports that attacks subsequently returned, but these were less severe, as well as less frequent. Although she says that attacks depend on levels of stress in her life, she estimates that she now has on average one attack per month.

Owing to her much improved condition, she has not felt it necessary to repeat the treatment course. Often the attacks now occur at night and she chooses medication for quick relief. The reduction in severity and frequency has to date (February 2013) remained. She reports that coMra-Therapy did not give her instant relief but credits it with lasting long-term effects.

## DISCUSSION

This case report demonstrates the successful and unprecedented preventative effect of coMra-Therapy on migraine attacks, in comparison to existing neurostimulatory and pharmacological preventative treatments. Commonly-used drugs for prevention of migraine such as Propranolol were shown to reduce attack frequency while medication is taken, but at the cost of negative side effects such as bradycardia, hypotension, bronchospasm, gastrointestinal complaints, and vertigo [3]. Moreover, many chronic headache sufferers are resistant or intolerant to drugs [4]. This disturbing situation led to a search for non-pharmacological treatments.

A recent review by Magis et al summarized the existing neurostimulatory methods for headaches [5]. For example, in a preventative trial for chronic migraine Saper et al used occipital nerve stimulation plus medication for acute pain [6]. At 3 months follow up the number of headache days reduced only from 22.4±6.3 to 15.7±10.0 (adjustable stimulation group, 28 participants). Note, however, that occipital nerve stimulation works only when the implanted stimulator is switched on. Similarly, other methods of neurostimulation such as repetitive transcranial magnetic stimulation, transcranial direct current stimulation and vagus nerve stimulation lead to a reduction of headache attacks only as long as stimulation is applied to the patient. There is no long term post-treatment effect.

In this case report, on the other hand, coMra-Therapy reduced attack frequency by 100% for three months after treatments had ceased, and to a lesser degree the effect was sustained for one year. Because this effect was so prolonged, one can argue that coMra-Therapy addresses the underlying pathology of migraine, rather than bringing about short term pain suppression.

Lastly, the costs associated with migraine therapy are an important factor for migraine sufferers. In the U.S. migraine-related annual costs are about 17 billion dollars, with triptan drugs accounting for the greatest portion of medication costs [7]. The cost of triptan medication alone, in moderate to severe continuous users, was on average \$1,505 dollars per patient per year (1998-2001 data) [8]. Looked at solely in this context, because of its substantially lower cost, its safety and easy self-admistration, coMra-Therapy merits far closer attention in the field of headache medicine.

#### CONCLUSION

coMra-Therapy has in this case proved effective in the long-term treatment of migraines, without any side-effects.

## ACKNOWLEDGEMENTS

The authors would like to thank the Patient, Sonja Harbich, for her co-operation.

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