

#### 31 March 2016

# The BMJ Press Release

## Questions over safety of whole body electrical stimulation

It's time to regulate this increasingly popular fitness trend, they say

It's time to regulate the use of whole body electrical stimulation, argue doctors in **The BMJ** today, after treating several people for muscle damage at their hospital.

Whole body electrical stimulation (ES) has recently emerged as an alternative form of physical exercise for improving fitness and health in healthy people, write Dr Nicola Maffiuletti and colleagues.

In a letter to this week's journal, they explain that, despite limited scientific evidence on the safety and effectiveness of this form of exercise, several ES company sponsored fitness centres have recently been opened in different countries worldwide, making this technology easily accessible to the general population.

The authors describe how in August 2015, a 20 year old man presented to their hospital with severe muscle pain shortly after a session of gym based whole body ES exercise supervised by a fitness professional.

He was diagnosed with rhabdomyolysis (muscle breakdown) and needed hospital treatment for five days.

In December 2015, Dr Maffiuletti and his colleague Dr Stephen Malnick were interviewed for an Israeli television documentary on the potential dangers of whole body ES.

They discussed the increased risk of rhabdomyolysis, warned against inappropriate use of whole body ES, and recommended a more active involvement of the regulatory authorities.

In the first few days after the documentary, several other people with aching muscles after supervised whole body ES exercise contacted their hospital for advice (two other diagnoses of rhabdomyolysis were made).

"We suspect that the true number of people injured by this form of exercise may be much higher but they are undiagnosed," warn the authors.

In January 2016, the Health Ministry of Israel issued an official safety warning and recommended that ES devices must not be used in gyms and without medical supervision.

"Regulatory authorities, clinicians, and users need a greater understanding and awareness of the risk of ES induced rhabdomyolysis, heightened ability to recognise this condition, and more diligent strategies to prevent this potentially harmful effect," they write.

"The Health Ministry of Israel has played a key part in this regard, and this should serve as an example to other regulatory authorities worldwide," they conclude.

# [Ends]

#### **Note to Editors**

Letter: It's time to regulate the use of whole-body electrical stimulation

http://www.bmj.com/content/352/bmj.i1693

### **About BMJ**

BMJ is a healthcare knowledge provider that aims to advance healthcare worldwide by sharing knowledge and expertise to improve experiences, outcomes and value. For a full list of BMJ products and services, please visit <a href="mailto:bmj.com">bmj.com</a>.