



Buteyko pseudoscience

Asthma is an important health problem in New Zealand, causing a great deal of morbidity and an economic burden estimated to be \$825 million per year. As with many chronic illnesses, patients with asthma often use alternative therapies and it is important that these therapies are researched in high-quality trials, as with any other medicine or health intervention.

Although the intervention may be alternative, the study methodology and reporting should be of the standard required for its non-alternative counterparts. Unfortunately, the trial by McHugh et al on the Buteyko Breathing Technique published recently in the NZMJ (<http://www.nzma.org.nz/journal/116-1187/710/>)¹ falls below that required standard.

The main concern is that the design of this trial would inevitably lead to a positive result. The dose of inhaled steroid was reduced if the participants were using less reliever medication. It can be assumed that the Buteyko group were encouraged to do breathing exercises if they felt asthma symptoms and to reduce reliever medication use.² Therefore, it is not surprising that the Buteyko group used less reliever and were instructed to use less inhaled steroid.

There are numerous other concerns regarding the trial design and reporting, including the following:

- To state that medication dosage was reviewed and appropriate advice given is simply not good enough for a trial whose main endpoint is medication dose.
- Symptom score data and other indices of ventilatory function were collected but not reported.
- It is not clear if smokers were excluded.
- The pairing of subjects is not adequately explained.
- It is not stated from which group(s) the four participants left the study.
- The abstract states that there were no adverse events, yet five patients required prednisone for exacerbations.

For the only objective outcome, % predicted FEV₁, there was no difference between the two groups.

Given the inadequacies in the reporting and methodology of the study, the authors' conclusion that Buteyko is efficacious in asthma management is not justified. A well-designed study with objective outcome measures is needed.

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References:

1. McHugh P, Aitcheson F, Duncan B, Houghton F. Buteyko Breathing Technique for asthma: an effective intervention. NZ Med J. 2003;116(1187). URL: <http://www.nzma.org.nz/journal/116-1187/710/>
2. Buteyko Asthma Management web site. URL: <http://www.buteyko.co.nz> Accessed January 2004.