

JOURNAL CLUB

Gabapentin for refractory chronic cough

This randomised controlled trial from Australia reported on the efficacy of gabapentin in chronic refractory cough and investigated its role in modulating central sensitisation (CS) of the cough reflex.

Recruitment of 62 patients was conducted over 2 years. Fifty-two patients completed the trial. All were non-smokers with a cough of more than 8 weeks' duration and had negative investigation and trials of treatment for asthma, rhinitis, gastro-oesophageal reflux and respiratory tract infection.

Participants were randomised to placebo or gabapentin for a 12-week period, with objective serial assessments of cough severity, sensitivity and quality of life. Dose range was 300–1800 mg. Patient groups, although well matched for efficacy variables, did not reach the target sample size at trial completion and had discrepancies in pre-trial cough frequency.

The primary outcome, change in the Leicester Cough Questionnaire (LCQ) score, showed significant improvement in 74% of patients in the gabapentin group versus 46% in the placebo group (number needed to treat 3.58). Secondary end points, change in cough frequency and cough severity score showed significant improvements in the gabapentin cohort.

CS screening questions and capsaicin sensitivity were used to assess the mechanism of action of gabapentin. In the gabapentin group, participants with symptoms of CS had significant improvements in LCQ score in comparison to those without CS symptoms, supporting the neuromodulatory effect of gabapentin on CS.

These promising results provide an evidence base for further research into the role of gabapentin in chronic cough and cough of established aetiology, with potential for it to be considered as an attractive treatment alternative to opiates.

► Ryan NM, Birring SS, Gibson PG. Gabapentin for refractory chronic cough: a randomised, double-blind, placebo-controlled trial. *Lancet* 2012;380:1583–9.

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