

NEW EVIDENCE-BASED RECOMMENDATIONS FOR PHARMACOLOGIC TREATMENT OF PHANTOM PAIN

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ABSTRACT

Norway's first guideline for rehabilitation after acquired upper-limb loss was published online 30 March 2016, in the open-access electronic guideline platform MAGICapp. The guideline covers all aspects of post-amputation rehabilitation, including the treatment of phantom pain. The authors were a multidisciplinary work-group, led by MD PhD Kristin Østlie. Making the guideline, we followed the steps in the AGREE-II tool. Also, we used GRADE for systematic assessment of the quality of the evidence, and for grading the strength of the recommendations (weak or strong).

The guideline has 24 recommendations for pharmacologic treatment of phantom pain after the acute postoperative phase. Several of the recommendations are weak, partly due to indirect evidence (e.g. studies on other types of neuropathic pain). This however means that the recommendations are valid for treatment of phantom pain in both upper- and lower limb amputees. The recommendations to some extent follow existing national and international guidelines for the treatment of neuropathic pain, but for some drugs, the evidence specific to phantom pain necessitated adjustment of these recommendations. Our main recommendations for phantom pain are summarized below.

We suggest that paracetamol and NSAIDs are tried before other pharmacologic agents. We then suggest the SNRI duloxetine before gabapentin, and pregabalin if these medications do not give sufficient pain relief. The evidence for the effect of duloxetine on phantom pain is of the same quality as for gabapentin and pregabalin. Duloxetine however has the advantage of not needing a time-consuming gradually dose increase, and also, the evidence suggests that the side effects for the most common (60 mg) dose are on the placebo level. Furthermore, in Norway, gabapentin must have been tried to get financial reimbursement for the use of pregabalin. The next pharmacologic agents suggested are topical lidocaine and topical capsaicin.

For peroral morphine, transdermal buprenorphine, the TCA amitriptyline and tramadol, the evidence is less convincing for phantom pain than for other neuropathic pain, and side effects are common. These are therefore not suggested as first line drugs.

For IV morphine, botulinum toxin injections, SSRI, beta blockers, memantine, ketamine, muscle relaxants (e.g. Baclofen), calcitonin, tapentadol, transdermal fentanyl, fentanyl nasal spray and local injections of corticosteroids, sufficient evidence for effect on phantom pain is lacking, and we therefore recommend against the use of these agents for phantom pain.

REFERENCE

Evidence-based guideline for rehabilitation after acquired upper limb loss in Norway [Norwegian] Østlie K (editor) et al. MAGICapp 30.03.16. www.magicapp.org/public/guideline/Jn3zaL