

## Topical glyceryl trinitrate may be effective in rotator cuff disease

<b>Clinical question</b>	How effective is topical glyceryl trinitrate (GTN) for rotator cuff disease?
<b>Bottom line</b>	Three small studies, 1 at moderate risk of bias and 2 at high risk of bias, assessed the effectiveness of GTN but each reported different treatment regimens and different outcome measures. They also included participants with differing duration of symptoms. There is some evidence from 1 study at high risk of bias that topical GTN is more effective than placebo for rotator cuff disease among patients with acute symptoms (less than 7 days' duration), but there is insufficient evidence to be certain about longer term effects. Headache was a common side effect in 1 trial and any benefits of treatment need to be balanced against the risk of headache.
<b>Caveat</b>	The inclusion criteria varied between studies and the selective reporting of outcomes limited the analysis of the available data. The effects on pain of GTN patches (1.25mg/day), along with rehabilitation instruction (such as exercise) and of GTN patches (5mg/day) compared to injection with corticosteroid and painkillers, were not reported by the studies included in the review. It is uncertain whether GTN patches (5mg/day) eliminate symptoms of rotator cuff disease because of the very low quality of the evidence. Improvement in people's physical function was not measured by any of the studies included in the review.
<b>Context</b>	Topical GTN has been used to treat chest pain for many years, and has been proposed as a promising treatment for muscle and tendon injuries. For treatment of soft tissue conditions, GTN is delivered topically, through the skin, using medicated patches.
<b>Cochrane Systematic Review</b>	Cumpston M et al. Topical glyceryl trinitrate for rotator cuff disease. Cochrane Reviews 2009, Issue 3. Article No. CD006355. DOI: 10.1002/14651858.CD006355.pub2. This review contains 3 studies involving 121 participants.
PEARLS No. 210, November 2009, written by Brian R McAvoy	

### [References]

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