

## CONTINUING PROFESSIONAL DEVELOPMENT

### PEARLS

### COCHRANE CORNER

## String of **PEARLS**

### Practical Evidence About Real Life Situations

#### Stroke

**PEARLS** are succinct summaries of Cochrane Systematic Reviews for primary care practitioners—developed by Prof. Brian McAvoy for the Cochrane Primary Care Field ([www.cochranelibrary.org](http://www.cochranelibrary.org)), New Zealand Branch of the Australasian Cochrane Centre at the Department of General Practice and Primary Health Care, University of Auckland ([www.auckland.ac.nz/uoaa](http://www.auckland.ac.nz/uoaa)), funded by the Ministry of Health ([www.health.govt.nz](http://www.health.govt.nz)), and published in NZ Doctor ([www.nzdoctor.co.nz](http://www.nzdoctor.co.nz)).

- MRI may be more sensitive than CT imaging for early detection of stroke
- Percutaneous vascular interventions may be beneficial in stroke
- Insufficient evidence for benefits of very early mobilisation after stroke
- Electromechanical-assisted training improves walking after stroke
- Mirror therapy improves motor function after stroke
- Repetitive task training can improve functional ability after stroke
- Insufficient evidence for interventions for post-stroke fatigue

**DISCLAIMER:** PEARLS are for educational use only and are not meant to guide clinical activity, nor are they a clinical guideline.



COCHRANE  
PRIMARY HEALTH  
CARE FIELD



Te Whare Wānanga o Tāmaki Makaurau



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MANATŪ HAUORA



## Thyroid hormone replacement does not improve subclinical hypothyroidism

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**THE PROBLEM:** The presentation of subclinical hypothyroidism (or mild thyroid failure) is often vague, with the non-specific symptoms of actual hypothyroidism, such as dry skin, cold skin or feeling colder, constipation and cognitive disturbance (e.g. slower thinking and poor memory). This is a common complaint, affecting 3% of men and 8% of women, with prevalence rising sharply in older age.<sup>1</sup> As the symptoms of subclinical hypothyroidism are non-specific, diagnosis is made if a patient's serum thyroid-stimulating hormone (TSH) level is above the upper limit of normal despite normal levels of serum free thyroxine.<sup>2</sup> There is debate over whether this condition should be treated, as the impact of subclinical hypothyroidism on patients' health remains unclear.

**CLINICAL BOTTOM LINE:** Levothyroxine replacement therapy does not improve symptoms or quality of life when compared to placebo in patients with subclinical hypothyroidism. However, there is some evidence that thyroid hormone replacement may improve some parameters of lipid profiles and left ventricular function.

#### Thyroid hormone replacement for subclinical hypothyroidism

	Success	Evidence	Harms
<b>Symptom score change</b>	Non-significant difference between intervention and placebo	Cochrane review <sup>3</sup>	Insufficient data to determine harms
<b>Improvement in total cholesterol level</b>	Non-significant difference between intervention and placebo		
<b>Improvement in quality of life</b>	Non-significant difference between intervention and placebo		

#### References

1. Hollowell JG, Staehling NW, Flanders WD, Hannon WH, Gunter EW, Spencer CA, et al. Serum TSH, T<sub>4</sub>, and thyroid antibodies in the United States population (1988 to 1994): National Health and Nutrition Examination Survey (NHANES III). *J Clin Endocrinol Metab*. 2002;87(2):489–99.
2. Fatourechi V. Subclinical hypothyroidism: an update for primary care physicians. *Mayo Clin Proc*. 2009;84(1):65–71.
3. Villar H, Saconato H, Valente O, Atallah A. Thyroid hormone replacement for subclinical hypothyroidism. *Cochrane Database Syst Rev*. 2007;3:CD003419.

All people residing in New Zealand have access to the Cochrane Library via the Ministry website [www.health.govt.nz/cochrane-library](http://www.health.govt.nz/cochrane-library)